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Exploring Dimensions of Health Literacy:
A Case Study of Interventions to
Promote and Support Breastfeeding

by

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Abstract

At a time when health literacy is emerging as a central concern in the health field, this thesis examines whether and how practitioners involved in the promotion of breastfeeding incorporate dimensions of health literacy as described in the current literature. Although there is little evidence that practitioners are familiar with specific definitions of health literacy, their description of practices reflected various facets of health literacy including functional health literacy, interactive and critical health literacy, and health literacy as composed of multiple literacies.

This qualitative case study was set in a rural health district in the Canadian province of Nova Scotia where breastfeeding initiation and duration rates are lower than national averages and where health literacy was identified as a community health issue. In-depth face-to-face interviews were conducted with 30 professional and lay practitioners. Practices in one hospital-based and two community-based settings were observed. Data were analyzed for themes using an iterative process of constant comparison. Interview informants and mothers provided feedback on preliminary findings in focus group interviews.

Findings reflect an emphasis on the transmission of information to persuade mothers to breastfeed, in contrast to strengthening their capacity to use information in making or acting on choices about how to feed their babies. Practitioners' discomfort in identifying clients with low literacy skills raises fundamental concerns about the stigma associated with low literacy. A focus on the functional health literacy deficiencies of clients, not on their capacities, appears limiting in addressing the complexities of breastfeeding promotion. There is little evidence of practices which reflect critical health literacy or efforts to reduce structural barriers to breastfeeding. In conclusion, the study suggests that practitioners' engagement in critical reflection of their breastfeeding promotion practices through the multidimensional frame of health literacy could help to further their practice and the conceptual development of health literacy.

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Glossary of abbreviations used in thesis

AMA	American Medical Association
CAPC	Community Action Program for Children
CCL	Canadian Council on Learning
CHB	Community Health Board
CPHA	Canadian Public Health Association
CPNP	Canada Prenatal Nutrition Program
DHA	District Health Authority
GASHA	Guysborough Antigonish Strait Health Authority
GIS	Geographical Information Systems
IOM	Institute of Medicine
LLL	La Leche League
PHS	Public Health Services
NCC	National Consumer Council
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
WHO	World Health Organization

Chapter 1

Introduction

1.1 Introduction

Health literacy has recently emerged as a key concept that unites concerns about literacy and health. Although definitions are highly contested, health literacy can most simply be considered “the skills required to enable access, understanding and use of information for health¹”. This thesis is about the extent to which the appearance of health literacy as a public health concern in Canada has penetrated the thinking and practice of practitioners involved in one area of health promotion—the promotion and support of breastfeeding.

In this chapter, I introduce the reader to the issue of health literacy and to why researchers, policy makers and practitioners internationally and, more specifically in Canada, have developed an interest in this topic. I also explain why the case of breastfeeding promotion is relevant to examining dimensions of health literacy emerging in the current literature. I conclude this chapter by giving an overview of the thesis with a brief summary of each chapter.

1.2 Connecting literacy and health

Decades of research in the North America and Europe have established strong links between health and educational attainment and income — both common markers of socioeconomic status. However, since the early 1990’s, attention has increasingly been directed to literacy and how it impacts directly and indirectly on health. There is growing evidence that people with lower levels of literacy are

¹ This short definition for communicating with the public was developed at a National Symposium on Health Literacy (CPHA 2008).

more likely to have poorer health outcomes than those with higher levels of literacy (e.g., Berkman 2004; Ronson and Rootman 2004). Studies have also shown significant differences in health-related knowledge and behaviours between people with strong reading skills and those with limited skills (Rudd 2007; Rudd et al. 2007). Recent findings from international literacy studies, which have included data pertaining to populations in the United States (US) and Canada, have pointed to the importance of literacy for one's ability to access information relevant to health and navigate through complex environments, including health systems (Rudd 2007). Few people are illiterate in countries such as the US and Canada, in the sense that they cannot read or write at all. Nevertheless, survey data suggest that many people have difficulty using the many complex print materials required for routine tasks of everyday living with accuracy and consistency, including those tasks within health contexts (Statistics Canada 2005; Canadian Council on Learning (CCL) 2008; Rudd et al. 2007).

Literacy is considered to be one of the most important determinants of population health in Canada (Ronson and Rootman 2004). According to Ronson and Rootman, “Literacy skills predict health status even more accurately than education level, income, ethnic background, or any other socio-demographic variable” (2004, p.155). People with low levels of literacy are more likely to report that they are in poor health than people with higher literacy levels (CCL 2008). Even when age, gender, education, mother tongue, immigration and Aboriginal status is controlled, this relationship holds (CCL 2008).

Although the two are connected, literacy levels are not the same as education levels. Literacy and years of schooling may be correlated on a population level; however, there is less concordance at the individual level (Ronson and Rootman 2004; Statistics Canada 1996). Estimating literacy on years of schooling is heavily biased because it does not control for the quality of schooling, variations in schooling standards across Canadian provinces and territories, or the influence of broader socio-demographic factors. Such a comparison does not take into account the impact on one's literacy level or opportunities to learn outside of traditional schooling. Some people may not attain high levels of credentialed educational attainment but have adequate skills to meet the literacy demands within their workplace and community; others can progress through school and not acquire functional literacy skills. Both groups may meet challenges when they encounter situations in which they need to access appropriate services or understandable health information in making decisions and taking action to support their health or that of their family members.

It is within the context of increasing awareness among academics and policy makers of the links between literacy and health that the concept of health literacy has made its appearance. While relationships between health literacy and health outcomes have not been firmly established, there is growing evidence that people with low levels of health literacy experience poorer health (e.g. Institute of Medicine (IOM) 2004; Ronson and Rootman 2004). As Rootman has noted, however, more evidence is needed to support the extent to which health literacy may be considered a determinant of population health in Canada (Rootman, Frankish and Kaszap 2007).

1.3 Diverse approaches to health literacy

Striking differences in orientations to health literacy reflect competing viewpoints from the fields of literacy and health. The many entry points to understanding health and literacy connections and, by extension health literacy, reflect the interest and involvement of a wide variety of disciplines. Consequently, numerous definitions of health literacy have emanated from different sources and reflect the various ways in which notions of literacy and health are now understood and applied. According to Pleasant and Kuruvilla (2008), bridging understandings stemming from multiple disciplines involved in addressing health and literacy is challenging because “both health and literacy are differently defined within and across disciplines and sociocultural contexts” (p. 152). Definitions of health literacy commonly referred to in the academic literature and health policy related publications are discussed in the next chapter’s review of the literature relevant to this thesis. Most striking are the distinctions between the medical/clinical and public health orientations to health literacy. The medical/clinical approach to health literacy tends to characterize health literacy as a problem that patients have and one that needs to be identified and overcome by their practitioners (Pleasant and Kuruvilla 2008). In contrast, a public health approach to health literacy is orientated towards the promotion of health and prevention of disease in communities and populations and draws on concepts of health promotion (Nutbeam 2000; Nutbeam 2008a). Here it is important to recognize that public health is informed by a multiple of disciplines. In talking about the “new public health”, Orme et al. (2003) have stated that “A biomedical, economic, psychosocial model of health, rather than a medical model, forms the basis of our 21st century view of public health” (p.11).

Researchers and practitioners in medical settings appear to have been first to claim an interest in health literacy. Over the last several years, the literature has been rich in studies and commentaries which have focused on the health literacy challenges that patients with low literacy skills encounter in accessing, understanding and adhering to medical instructions given to them by their health practitioners. Health literacy has, however, also become a focus of concern and debate within the health promotion field (e.g. Kickbusch 2002; Nutbeam 2000; Rootman, Frankish and Kaszap 2007). Nutbeam, in particular, has drawn a distinction between medical/clinical and public health approaches to health literacy (Nutbeam 2000; Nutbeam 2008a). Nutbeam (2000) has framed health literacy as an outcome of effective health promotion strategies and an important contributor to population health outcomes. He has been influential in extending the definition of health literacy beyond the individual patient's command of the written word as may be needed to access, understand and use medical instructions and navigate health care systems (Nutbeam 1998). Nutbeam (2000) has suggested that efforts reflecting a public health perspective of health literacy contribute to overcoming structural barriers to health by addressing the social, economic, and environmental determinants of health. Thus, for Nutbeam, a public health view implies that health literacy has not only personal, but also social benefits.

Increasingly, health literacy has been conceptualized as the interaction of individuals with various systems and contexts where demands for managing health-relevant information are placed on people. As Baker (2006) noted, health literacy is "a complicated construct that depends on individual capacity to communicate and the demands posed by society and the health care system" (p.

882). A landmark report on health literacy, published in the United States (US) by the Institute of Medicine (IOM 2004), emphasized that health literacy is “a shared function of social and individual factors” (p.4). It added that there was a need to broaden health literacy thinking beyond a focus on the ability of the individual to one that encompasses individuals and the systems with which they interact.

1.4 Scope of research and policy interest in health literacy

Health literacy is a robust field of study, as indicated by the recent preponderance of literature pertaining to it. There has been a dramatic increase in its interest over the last decade with most research activity centred in the US (Rudd et al. 2007). By contrast, health literacy has been a relatively neglected area of research in Europe until recent years (Kondilis, Soteriades and Falagas 2006). In Canada, there has been interest for some years on literacy and health with only recent attention directed to the concept of health literacy (Rootman, Frankish and Kaszap 2005). Stableford and Mettger (2007) suggested that health literacy came late in capturing the interest of researchers and policy makers in Canada and Europe because citizens there, in comparison to those in the US, could more easily access healthcare and information through their nationalized systems and faced fewer “navigation” issues. This, it has been suggested, was in contrast to the US experience where no nationalized health care system exists. Nevertheless, health systems are becoming more complex, sources of health information are multiplying, and expectations that citizens should be more self-reliant in caring for their health are growing. Stableford and Mettger have claimed that, increasingly, citizens everywhere appear to struggle to read, understand, and use information essential in managing their health concerns.

Health literacy is gaining the attention of researchers and policy makers internationally. For example, in the last few years, health literacy has been featured in health policy documents not only in the US (IOM 2004), but also in the European Union (Kickbusch, Wait and Maag 2005), the United Kingdom (Sihota and Lennard 2004), and most recently, in Canada (Rootman and Gordon-El-Bihbety 2008).

Recent reporting of the existence of low levels of health literacy in the Canadian population has become a driver for current research, policy and practice development (Rootman and Gordon-El-Bihbety 2008). Based on analysis of international literacy survey data, the Canadian Council of Learning (CCL 2008) concluded that low levels of health literacy are a serious population health issue. They reported that a large proportion of Canadian adults lack the skills necessary to respond to the health information demands that they confront in different contexts (CCL 2008). According to the CCL report released in February 2008, “an estimated 60% of Canadian adults have health-literacy skills below Level 3, the level thought to be needed in order to appropriately access, understand and evaluate health information for themselves” (CCL 2008, p. 29). The report goes on to say that “differences in health status that are associated with differences in health-literacy are large enough to imply that significant improvement in overall levels of population health might be realized if a way could be found to raise adult health-literacy levels” (p.29), and that such improvement may lead not only to improved health but also “real savings for the health system and benefits for our health-care system and our national productivity” (p.29).

Within the context of this increased emphasis on health literacy, health practitioners are being urged to take into account the literacy level of their clientele and direct their information efforts to enhance clients' health literacy skills within their various practice settings (Rootman and Gordon-El-Bihbety 2008). As first argued by Nutbeam (2000) and later by Rootman, Frankish and Kaszap (2007), "health literacy is a key outcome of health education and one that health promotion could legitimately be held accountable for" (p. 62). According to Rootman and colleagues, the recent introduction of the concept of health literacy reflects an evolution and revitalization of health promotion thinking and practice. They have suggested that health literacy is a concept that may well affect the way in which the field of health promotion is viewed and also "the way in which people organize their work within the field" (p.61).

Currently, there appears to be a lack of awareness and knowledge about health literacy among Canadian health and literacy professionals (Rootman and Gordon-El-Bihbety 2008). Although numerous health literacy interventions have been implemented in Canada, few have been rigorously evaluated (King 2007). Rootman, Frankish and Kaszap (2007) acknowledged that, although the concept of health literacy has "made significant inroads into research, practice, and policy in health promotion in Canada and elsewhere" (p.68), there are many outstanding questions with respect to its place in health promotion practice. The Canadian contribution to understanding the links between literacy and health and the concept of health literacy is discussed further in the next chapter as part of the review of literature.

1.5 The relevance of health literacy to breastfeeding promotion

Mothers have traditionally been the target of large amounts of information intended to influence their decisions on how to feed their babies and children. The delivery of infant feeding information by government and professional health authorities to expectant and new mothers has and continues to be a public health priority in Canada (Ostry 2006a). Policy statements from international, national and provincial levels of government as well as health professional bodies have emphasized the importance of providing information to enable women to make informed feeding choices with the preferred choice being breastfeeding. As stronger links are drawn between breastfeeding and prevention of disease throughout the life course, breastfeeding promotion appears to be gaining prominence as a priority of health agencies and health professionals.

Despite convincing evidence supporting the health benefits of breastfeeding and a wide array of efforts by a range of professional and lay practitioners supporting breastfeeding, many Canadian women do not breastfeed. The case of breastfeeding promotion practice highlights one of the most contentious aspects of the concept of health literacy—how to encourage the “use” of information in making health relevant decisions. Of particular relevance to this study is the fact that women with less education and lower literacy levels are less likely to breastfeed. Striking disparities in rates of breastfeeding initiation and duration make breastfeeding a particularly pressing public health issue in which to explore practitioners’ engagement with notions of health literacy.

Researchers have been called to explore the multiple health contexts in which individuals are required to apply health literacy skills (IOM 2004). Most health literacy research has focused on disease management involving patients and medical practitioners within clinical settings. While this study is undertaken within the context of health promotion, it concerns an issue relevant to both health promotion and medical practice. It examines the breastfeeding promotion practices of medical and public health professionals and lay practitioners. Efforts to promote and support breastfeeding are undertaken by practitioners in various hospital and community-based settings situated along the perinatal continuum of care.

As health literacy emerges as a public health concern in Canada, it is important to examine the extent to which the concept of health literacy has penetrated the thinking and practices of practitioners. In this study, I focus on the practices of those involved in promoting breastfeeding. The aim and objectives for this thesis are outlined next.

1.6 Aim and objectives of the thesis

The aim of this thesis is to determine whether and how professional and lay practitioners incorporate dimensions of health literacy into their breastfeeding promotion practice. This thesis focuses on three objectives:

1. To examine the extent to which practitioners' descriptions of their breastfeeding promotion efforts, and observed practices in selected settings, reflect various dimensions of health literacy as described in current literature.

2. To examine difficulties and dilemmas in operationalising health literacy which practitioners identify in their talk about their breastfeeding promotion practices.
3. To explore implications of the findings for incorporating health literacy approaches into breastfeeding promotion practice.

These objectives have set the direction of this thesis as described next.

1.7 Overview of the thesis

Following this introductory chapter there are seven chapters. In Chapters 4, 5, and 6, I present results from my data analysis. In these chapters, I discuss findings in a way that reflects the evolution in thinking about health literacy from academic and policy perspectives. I begin by focusing on functional health literacy, the more traditional clinical approach to health literacy. I then move to examining dimensions of a public health model of health literacy which centres on interactive and critical health literacy, and finally, to an expanded public health model which reflects the recent idea of multiple literacies. Leading up to these chapters is the review of the current literature, description of the methodology, the context in which the study is set, and methods of data collection and analysis used.

Following the three chapters describing the results of the study, I identify implications of my findings for practice and then draw conclusions in the final chapter.

Chapter 2, *Review of the literature*, appears in two parts. The first part charts the course of health literacy as an emerging concept of international interest with a focus on the Canadian context. I discuss current debates on the conceptualization and measurement of health literacy and describe current health literacy models

and interventions. The second part situates breastfeeding as a public health priority within Canada. Here, I review key literature pertaining to women's choice of breastfeeding, interventions to promote breastfeeding, and health literacy and breastfeeding.

Chapter 3, *Methodology and methods*, explains how I conducted my study and the context in which it was undertaken. I begin by presenting my standpoint as the researcher and why I chose a qualitative case study as my research approach. I then provide the reader with an understanding of the context in which findings from this case study are set. I describe the geographical location, population demographics and the organizational context in which breastfeeding promotion practices are undertaken and policies pertaining to health literacy and breastfeeding situated. I then outline the methods I used to collect, manage and analyze data including ethical considerations and establishing the trustworthiness of my findings. In this chapter, I also profile the practitioners who were interviewed and describe the settings where their practices were observed.

Chapter 4, *Reflections of functional health literacy in practice*, is the first of three chapters in which I examine the extent to which practitioners' descriptions of their breastfeeding promotion practices, and the practices I observed in selected settings, reflect various dimensions of health literacy in current literature. In this chapter, I examine the extent to which practitioners recognize functional health literacy as a concern; whether and how their descriptions of their breastfeeding promotion efforts and observed practices reflect strategies used to accommodate and/or enhance their clients' functional health literacy; and lastly, what tensions

and barriers related to addressing functional health literacy emerged as they described their practices.

Chapter 5, *Reflections of interactive and critical health literacy in practice*, examines whether and how practitioners' descriptions of their breastfeeding promotion practices and observed practices reflect Nutbeam's suggestions for enhancing interactive and critical health literacy; the extent to which their talk reflects their recognition and identification of ways to advance interactive and critical health literacy; and lastly, what tensions and dilemmas related to interactive and critical health literacy arose throughout their talk.

Chapter 6, *Reflections of multiple domains of health literacy in practice*, examines the extent to which practitioners' descriptions of their breastfeeding promotion practices reflect ways in which practitioners drew upon multiple domains of health literacy in their breastfeeding promotion efforts. In this chapter, I examine the extent to which practitioners recognize and identify ways they can advance scientific, cultural and civic health literacy in their practice. Lastly, I discuss the tensions and barriers related to multiple domains of health literacy that were identified as they talked about their practices.

Chapter 7, *Implications for practice*, discusses implications for practice drawn from findings presented in the previous three chapters. I identify measures that practitioners can take in their breastfeeding promotion efforts which reflect functional health literacy, interactive and critical health literacy, and health literacy as composed of scientific, cultural and civic literacies. In reflecting upon

these findings, I argue that there is a need for the engagement of practitioners in critical reflection so they, themselves, can determine the implications of applying notions of health literacy to their practice.

Chapter 8, *Conclusion*, discusses the significance and contributions of my findings to breastfeeding promotion practice and to the emerging study and practice of health literacy. I also discuss strengths and limitations of this research, and suggest future directions for research with respect to breastfeeding promotion and health literacy.

1.8 Summary and conclusion

This chapter has introduced the reader to the timely topic of health literacy. It has outlined why health literacy is of current research interest in Canada and internationally, and explained why the case of breastfeeding promotion practice is relevant to an examination of the dimensions of health literacy as emerging in the current literature. In the next chapter I review the literature relevant to this thesis.

Chapter 2

Review of the literature

2.1 Introduction

In the first part of this chapter, I chart the evolution of the concept of health literacy related to both its conceptualization and measurement with attention to current debates in the literature. I also highlight the appearance of health literacy as a concept relevant to health promotion and public health practice, in particular within the Canadian context. In the second part of the chapter, I review key literature regarding the promotion of breastfeeding which is particularly relevant to practitioners' engagement with notions of health literacy. This is not intended to be an exhaustive review of the extensive bodies of literature pertaining to both health literacy and the promotion of breastfeeding; rather, it seeks to present the literature which is central to the topic under discussion (for the literature search strategy, see Appendix L, p. 427). While I refer back to this literature review in subsequent chapters, further literature will be introduced where relevant throughout the remainder of the thesis.

2.2 Health Literacy

It is clear from the abundance of academic literature that health literacy is a rapidly expanding area of research interest. In addition, there is an expanding body of “grey literature” in the form of conference proceedings, reports, and policy papers. Rima Rudd and her colleagues from Harvard School of Public Health reported that the number of studies and editorials addressing health literacy published between 2000² and the end of 2004 more than doubled those published

² Rudd published her first review of the literature on health literacy in 2000 (Rudd et al. 2000).

between 1970 and 1999 (Rudd et al. 2007). Based on her examination of peer reviewed publications, Rudd summarized the body of health literacy literature according to four strands of interest regarding the health-related implications of limited literacy skills. These included:

- assessment of readability of print communications and appropriateness of materials to skills of intended audiences
- differences in knowledge of health relevant issues among readers with different levels of reading skill
- use of new technologies in health communications
- development and to a lesser extent evaluation of programmes designed to improve health literacy.

As Rudd noted, since 2000 many authors “have highlighted the importance of moving beyond a focus on the individual’s skills to consider health literacy as an interaction between the demands of health systems and the skills of individuals” (2007, p.175). This is an important point as it relates not only to definitions of health literacy in the current literature but also to how practitioners engage with notions of health literacy in their practice—the central focus of this thesis.

Canada has been addressing concerns about literacy and health for many years as Hauser and Edwards (2006) pointed out in a recent review of the literature. The term "literacy and health" has been used to refer to the understanding that literacy is a determinant of health, both for individuals and for populations (Perrin 1998). It reflects increasing evidence supporting the impact of literacy skills on socio-economic status, employment, quality of life and use of health services. The concern about literacy and health in Canada dates back to the late 1980s when the Ontario Public Health Association (OPHA) collaborated with Frontier College, the country’s oldest literacy institution, on a literacy and health project. Their first

report, *Making the World Healthier and Safer for People Who Can't Read*, was published in 1989 (Ontario Public Health Association (OPHA) and Frontier College 1989). A second report, *Partners in Practice* (Breen 1993), described the follow-up collaboration between literacy and health service practitioners and adult learners. In 1994, the Canadian Public Health Association (CPHA) established the National Literacy and Health Program. Through this programme, 27 professional organizations have collaborated in numerous initiatives to improve health services for Canadians with lower literacy skills. Examples include conferences and workshops, resource materials and a plain language service.

In 2000, Rudd, together with Canadian health promotion researcher Irving Rootman, introduced the concept of "health literacy" for the first time in Canada at a CPHA sponsored workshop at the First Canadian Conference on Literacy and Health. At that time, they both emphasized that "health literacy needed to be seen in relation to the broader concept of literacy and health that was dominant in Canada" (Rootman, Frankish and Kaszap , 2007, p.64). Since then, Rootman has led a national programme of research which has contributed to conceptual and operational definitions and new frameworks for literacy and health and, more recently, for health literacy. Rootman and Ronson (2005) have described this work by outlining the evolution of literacy and health in Canada. At the time of this writing, the most recent milestone has been the March 2008 release of the report of the Expert Panel on Health Literacy which Rootman co-chaired (Rootman and Gordon-El-Bihbey, 2008). The Panel was convened by the Canadian Public Health Association (CPHA) in 2006 and funded by the Health and Learning Knowledge Centre of the Canadian Council on Learning (CCL).

One of the conclusions drawn by this Panel was that there is “a lack of awareness and understanding of the concept of health literacy in Canada” (Rootman and Gordon-El-Bihbety, 2008, p.13).

In the next section, I focus on descriptions of health literacy in the literature. Because different ways of conceptualizing health literacy reflect different understandings of literacy, I begin by looking at the challenges associated with defining literacy.

2.2.1 Defining literacy

Descriptions of literacy have gone through dramatic changes over the last decades and there is still not one universally accepted definition. Descriptions have expanded from the traditional focus on reading and writing skills to include a wider range of abilities needed for life in an increasingly complex information-based society. The literature is awash in approaches to defining literacy.

According to Quigley (2005), the debate has centred on two competing ways of conceptualizing literacy. On the one hand, some people have considered literacy as the ability of individuals to perform reading, writing and numeracy activities, stressing the need to have the tools to measure performance in these activities. On the other hand, others have argued that literacy is a social construct and reflects social judgments on what adults need to know to be considered literate in the society in which they live. That literacy activity reflects social practice is consistent with the notion that all uses of language are situated in particular times and places (Barton, Hamilton and Ivanic 2000).

Most definitions have begun with the fundamental need to have command over use of the written word and have emphasized the instrumental, or *functional*, value of literacy. For example, a common Canadian definition refers to literacy as “the ability to understand and employ printed information in daily activities at home, at work and in the community – to achieve one's goals, and to develop one's knowledge and potential.” (Quigley, Folinsbee and Kraglund-Gauthier 2006, p. 12). This functional definition, which focuses on people’s ability to use information to carry out their daily lives and to participate in society, has been used by Statistics Canada and Human Resources and Skills Development Canada in the various International Adult Literacy Surveys (IALS) in which Canada has participated. In their *State of the Field Report on Adult Literacy*, Quigley, Folinsbee and Kraglund-Gauthier (2006) reported that this definition was accepted by provincial literacy coalitions across Canada.

In 2003, the United Nations Educational, Scientific and Cultural Organization (UNESCO) proposed the following definition of literacy which also focused on one’s ability to use the written word:

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning to enable an individual to achieve his or her goals, to develop his or her knowledge and potential, and to participate fully in the wider society (UNESCO, 2004, p.13).

In the above example, literacy was defined as reading and writing at a level that enables one to understand and communicate ideas in a literate society, and so participate in that society. However, this view of literacy did not consider that people communicate information and develop their knowledge in ways outside of the written word, such as in through oral communications. Moreover, it did not

take into account the range of skills required to live, work and access services and information in a technologically advanced society. One year later, recognizing the diverse purposes for literacy in today's world, UNESCO made the following statement about literacy.

The plurality of literacy refers to the many ways in which literacy is employed and the many things with which it is associated in a community or society and throughout the life of an individual. People acquire and apply literacy for different purposes in different situations, all of which are shaped by culture, history, language, religion and socio-economic conditions. The plural notion of literacy latches upon these different purposes and situations. Rather than seeing literacy as only a generic set of technical skills, it looks at the social dimensions of acquiring and applying literacy (UNESCO 2004, p.3).

The appearance of the above description reflected a dramatic rethinking from earlier statements on the concept of literacy. It represented a shift from what was essentially a school-based model of literacy focused on individuals' ability to master a set of functional competencies to an approach to literacy which emphasized the socio-cultural context in which people develop and use literacy.

The discourse on the plurality of literacy not only recognises that different individuals require different literacies but also that the demand for literacies differs at different times across the lifespan and in different settings. Situated within the context of current economic, political and social trends, more recent thinking on literacy recognises that "there are many practices of literacy embedded in different cultural processes, personal circumstances and collective structures" (UNESCO 2004, p. 6). Rather than seeing literacy as composed of distinct entities, this plurality of literacy denotes its dynamic nature "based on manifold communicative and social practices" (UNESCO 2004, p. 29). This more complex notion of literacy presents a change in thinking away from what literacy

does to people towards what people *can do with* literacy. From a practical stance, this approach calls for a redirection of efforts to advance literacy from a focus on changing individuals to creating and enhancing literate environments.

The contention that people become literate within a social context and through interaction with others suggests that reading and writing make sense only when studied in the context of social and cultural practices. According to Street (2003), literacy practices “refer to the broader cultural conception of particular ways of thinking about and doing reading and writing in cultural contexts” (p.79).

Originating in the UK, the ‘New Literacies Studies’ has concentrated less on acquisition of technical skills and more on literacy as a social practice (Gee 1991; Street 2003). To be literate requires one to apply not one but multiple literacies in various situations and contexts. This more culturally responsive view of literacy emphasizes that literacy practices vary from one context to another; hence, everyday uses and meanings of literacy differ according to one’s particular employment, education or even health context. Thus, instead of speaking of literacy as a commodity and discrete ability that one has or not, one frequently hears reference to various literacies, such as computer literacy, financial literacy or media literacy.

Cervero (1985) argued that while it may be possible to derive a conceptual definition of literacy, an operational definition is not feasible because “any definition specific enough to provide goals and content for programming is principally an expression of values” (p.51). Given the fundamental problem in establishing a set of values common to all people in a pluralistic society, it is not surprising that defining literacy is so contentious. Some authors have argued that

literacy and health literacy are separate concepts, while others have contended that health literacy is simply literacy within the health context (Rootman 2004).

Recognising the ambiguous nature of literacy appears central to understanding the evolution of diverse approaches to defining health literacy in the literature and more specifically, to identifying how health practitioners engage with various notions of health literacy.

2.2.2 Defining health literacy

Definitions of health literacy reflect not only pedagogical debates within the field of literacy, but also the perennial tensions between individual and population approaches within the health field. The predominant focus of health literacy in North America has been on enabling patients with low literacy to adhere to medical instructions within clinical settings. Increasingly, attention has been directed to health literacy within the context of population health concerns and public health approaches. In this section, I discuss the emergence of definitions which reflect a medical approach and then turn to those reflecting a public health approach.

The term health literacy first appeared in the literature in 1974 within the context of school health education. Simonds (1974) suggested that there should be minimum standards for health literacy for all grade levels. However, health literacy attracted little interest until the 1990s when it was integrated into US National Health Education Standards and adopted in 1995. In this case, it was defined as "the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways which are health-enhancing" (Joint Committee on National

Health Education Standards 1991). These core processes of accessing, understanding and using information relevant to health are reflected in most definitions of health literacy which have emerged since the mid-1990s.

In 1999, the American Medical Association (AMA) published a report on health literacy which described health literacy as the “ability to read and comprehend prescription bottles, appointment slips, and other essential health-related materials required to successfully function as a patient” (Ad Hoc Committee on Health Literacy 1999, p.552). This report focused on the abilities of individuals to meet literacy demands within medical and health care settings, referring to health literacy as “a constellation of skills including the ability to perform basic reading and numerical tasks required to function in the health care environment” (Ad Hoc Committee on Health Literacy 1999, p.533).

The term, “functional health literacy” reflects a concept of health literacy which emphasizes the basic literacy skills people need to access, understand and use health information to function within the health care setting. The AMA has maintained its focus on functional health literacy within the context of health care interactions. In a book called *Understanding Health Literacy* published by the AMA, Schwartzberg, VanGeest and Wang (2005) depicted functional health literacy as an individual-level construct “composed of a combination of attributes that can explain and predict one’s ability to access, understand, and apply health information in a manner necessary to successfully function in daily life and within the health care system” (p.6). These authors situated health literacy within the context of the individual patient, the patient-provider interaction, and the environment, including the culture that influences patients. They argued that the

more culturally relevant and appropriate the information, the more attention the individual is likely to give it and, ultimately, the greater the likelihood she or he will respond to the information.

In the early 2000s, Ratzan (2001) proposed that health literacy could be a useful bridging concept linking knowledge and practice, and helpful in framing health promotion activities. He and Parker defined health literacy as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” (Ratzan and Parker 2000, p. 3). Their definition did not confine health literacy to health communications in the clinical setting. This definition was adopted in the US Healthy People 2010 objectives (US Departments of Health and Human Services, and Office of Disease Prevention and Health Promotion. 2000) and later, by the Committee on Health Literacy of the Institute of Medicine (IOM) of the National Academies in their 2004 report entitled, *Health Literacy: A Prescription to End Confusion*. Although the IOM report focused heavily on health literacy within clinical settings, it also pointed to the need to extend the meaning of health literacy beyond health-care settings. It acknowledged that individuals obtain information from many sources and make health-relevant decisions in a wide range of contexts. This landmark report framed health literacy as a “mediator between individuals and the health context” (IOM, 2004, p.32). As they stated, health literacy was relevant to both those seeking and those providing information: “Health literacy emerges when the expectations, preferences, and skills of individuals seeking health information and services meet the expectations, preferences, and skills of those providing information and services” (IOM 2004, p.2). This statement implies that there is a shared responsibility for

health literacy between individuals and the systems through which they access health information. The IOM report called for continuing work to develop both the definition and conceptual framework for health literacy in a way that addresses “the critical role that society, the health system, and the education system play in creating a truly health-literate America” (2004, p. 37).

As definitions of health literacy were unfolding in the US, people in the international fields of health promotion and public health were calling for a broader definition of health literacy that would move beyond comprehension of the written word and patients’ interactions with the health care system. Most noteworthy are the efforts of Nutbeam and Kickbusch (2000) who introduced the concept of health literacy into the international health promotion literature.

Nutbeam was located in the UK and Kickbusch was based in Switzerland with the World Health Organization (WHO). Kickbusch (2001) and Nutbeam (2000) each argued that ‘health literacy’ is a key outcome of health education and agreed it should be situated within the broader context of health promotion. They pressed for redefining health literacy so as to encompass the notion of empowerment— a key concept imbedded in the WHO definition of health promotion as “the process of enabling people to increase control over, and to improve their health” (WHO 1998, p.1). The following definition of health literacy, proposed by Nutbeam and Kickbusch (Nutbeam 1998), was included in the WHO’s health promotion glossary: “Health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health” (WHO 1998, p.10). Clearly, this definition implies that health literacy entails more than

being able to read a medicine bottle or a consent form. The definition further states that by “improving people’s access to health information and their capacity to use it effectively, health literacy is seen as critical to personal empowerment” (WHO 1998, p.10).

Recognition that individual decision-making is influenced by the social structures that determine health within both individual and broader community and societal contexts was an important turning point in the conceptualization of health literacy. It brought the idea of health literacy closer to health promotion and to public health’s focus on addressing the non-medical determinants of health³. In describing empowerment for health, the WHO’s glossary stated:

...health promotion not only encompasses actions directed at strengthening the basic life skills and capabilities of individuals, but also at influencing underlying social and economic conditions which offer a better chance of there being a relationship between the efforts of individuals and groups, and subsequent health outcomes...” (WHO 1998, p.6).

The glossary refers to individual empowerment as the ability of individuals to make decisions and have control over their personal life. It also refers to community empowerment as involving collective action to influence and gain control over the determinants of health. Kickbusch (2001) called for even further expansion of the WHO glossary definition of health literacy to include “the dimensions of community development and health-related skills beyond health promotion, and to understand health literacy not only as personal characteristics, but also as a key determinant of population health” (p.293).

³ Determinants of health are defined by the WHO as “*the range of personal, social, economic and environmental factors which determine the health status of individuals and populations*” (WHO 1998, p.6).

In the most recent literature, health literacy has been depicted in a way which reflects multiple literacies (Zarcadoolas, Pleasant and Greer 2006). Zarcadoolas, Pleasant and Greer claimed that “Aspects of health literacy beyond reading skills, such as the power of spoken and on-line communication, the impacts of understanding science and media, and the documented importance of cultural understanding lead us to further explore our understanding of how people make meaning of health information” (2005, p.196). Their approach incorporates multiple ways of knowing drawing from the idea of the plurality of literacy and literacy as social practice which they say is consistent with public health practice. They presented an expanded model for health literacy comprised of four literacy domains: fundamental literacy, scientific literacy, cultural literacy, and civic literacy. These domains of health literacy and their expanded model are described further in section 2.2.3.2 as an example of a public health approach to health literacy.

Zarcadoolas, Pleasant and Greer defined health literacy as “the wide range of skills and competencies that people develop over their lifetimes to seek out, comprehend, evaluate, and use health information and concepts to make informed choices, reduce health risks, and increase quality of life” (2006, p.76). Their definition is not unlike most definitions of health literacy in its inclusion of the core processes of seeking or accessing information, comprehending or understanding information, and using health information. It also, however, incorporates evaluating information as a core element, thereby acknowledging the critical need for appraising information within the context of the abundance, complexity and inconsistency of information people receive from a wide array of

sources and through multiple channels. This definition's explicit reference to the use of health information and concepts in making informed choices, reducing health risks and increasing quality of life reflects the growing demands for easily understood, relevant health information in a range of settings characteristic of contemporary society including those outside the health care system.

This idea of multiple literacies is also reflected in the concept of eHealth literacy⁴. Canadian researchers, Norman and Skinner (2006), coined the term "eHealth literacy" as "the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem" (p. 2). In their model for eHealth literacy, they integrated six different facets of literacy: literacy, health literacy, information literacy, scientific literacy, media literacy, and computer literacy.

Various definitions of health literacy have appeared in national policy documents in the last few years. They typically echo the definitions and points already seen. For example, in 2004, Britain's National Consumer Council (NCC) adopted the U.S National Health Education Standards' definition of health literacy (Sihota and Lennard 2004). As cited earlier, it was defined as "the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways which are health-enhancing" (Joint Committee on National Health Education Standards 1991). Although the NCC's report firmly anchors health literacy within the health care context, it points to "a need to develop a broader-based investigation that

⁴ eHealth literacy stems from the notion of eHealth which reflects the increasing use of information and communication technology, especially the Internet, to improve health and enable health care Eng (2001).

goes beyond medically determined studies to include sociological research. This is vital in order to look specifically at differences between groups in decision-making capacity and preferences” (Sihota and Lennard 2004, p.7).

In contrast to the US where the focus on health literacy has tended to be within the context of interactions between medical providers and their patients in clinical care settings, Canada has leaned more towards a public health approach. Indeed, there has been relatively little interest among Canadian medical practitioners in health literacy (Rootman 2006). The CPHA’s Expert Panel on Health Literacy (Rootman and Gordon-El-Bihbety 2008) widened the frame for viewing health literacy beyond the ability of the individual to the interaction of people and the systems through which they access information. In their report, the Panel addressed individual and system barriers to health literacy and recommended the development of a pan-Canadian strategy for health literacy Canada. They presented the following vision for a health literate Canada:

All people will have the capacity, opportunities and support they need to obtain and use health information effectively, to act as informed partners in caring for themselves, their families and communities, and to manage interactions in a variety of settings that affect health and well-being (Rootman and Gordon-El-Bihbety 2008, p.23).

The Panel used the following working definition of health literacy in this 2008 document: “The ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course” (Rootman and Gordon-El-Bihbety 2008, p.11).

This definition was adapted from the following definition developed by a team of Canadian researchers led by Rootman: “The degree to which people are able to access, understand, appraise and communicate information to engage with the

demands of different health contexts in order to promote and maintain good health across the life-course” (Kwan, Rootman and Frankish 2006, as quoted in Rootman and Gordon-El-Bihbety 2008, p.11).

The Panel’s definition takes into account the ability of people as well as demands for health literacy imposed by various health contexts. It explicitly refers to appraisal and communication of information as key health literacy processes. The omission of *use* of information commonly seen in other definitions reflects an understanding of use of information not so much as a part of the process of health literacy but rather as an outcome that can be measured in determining, for example, the effectiveness of health literacy interventions⁵. The definition was intended to imply that health literacy is mediated by “education, culture and language, by the communication skills of professionals, by the nature of materials and messages, and by the settings in which health-related support are provided” (Rootman and Gordon-El-Bihbety 2008, p.11). Health literacy is also recognised as an ability which is needed over the life course, not just in dealing with health communications pertaining to current medical issues and encounters.

Definitions span the spectrum from a focus on health literacy as the ability of individuals to access, understand and use information within the health care context to broader notions reflecting the interaction of individuals with systems. Broader ways of thinking recognize health literacy as a property of individuals and societies. In general, however, there are two approaches to defining health literacy: the clinical approach and the public health approach (Nutbeam 2000; Pleasant and Kuruvilla 2008). Next, I take a deeper look into literature which

⁵ Personal communication with Rootman, June, 11, 2008

frames health literacy within a public health perspective and then I describe two models which reflect a public health approach.

2.2.3 Focus on health literacy from a public health approach

Since the release of the IOM report in 2004, there has been increasing attention in the literature to health literacy within the context of public health. There are differing viewpoints with respect to what health literacy means from a public health perspective. This lack of consensus is not surprising given the ideological and organizational differences shaping national public health services in various countries.

In the US, Gazmararian et al. (2005) claimed that the public health community needed to examine the ethics of providing health information to the public. According to them, many Americans do not have the ability to access and understand the health information they need. They argued that an “ethical approach to remediating low health literacy would be to train, educate, and empower people, giving them the skills and abilities they need for functional health literacy” (2005, p.319). Although Gazmararian and colleagues acknowledged that “health information knowledge and resources of health professionals and organizations need improvement” (2005, p. 319), their suggestions for developing a health literate public focus more on enhancing health literacy skills of individuals than on modifying the systems which create the demand for functional health literacy skills.

Broader approaches to framing health literacy as a public health concern have emerged from outside the US. For example, Kickbusch has been clearly of the opinion that health literacy should become incorporated into public health practice. She argued that “the influence of social capital and health literacy is part of the development of a more integrative public health agenda that moves beyond a disease-by-disease and risk-by-risk approach” (2001 p.295). In a more recent EU document on health literacy, Kickbusch, Wait and Maag (2005) stressed that health literacy was a public health imperative. They contended that health literacy is essential to enabling citizens to have more control over their health. For them, health literacy “is the ability to make sound health decisions in the context of every day life – at home, in the community, at the workplace, in the health care system, the market place and the political arena” (p. 8). Their definition emphasizes the use of information in decision-making.

Kickbusch and colleagues have claimed that a high degree of health literacy is demanded of people today in order to locate appropriate services, manage complicated and contradictory information, and make health-related decisions in the face of the increasing volume and complexity of information delivered through a variety of channels. They suggested that health literacy is “a key competence in the health society” (Kickbusch, Wait and Maag 2005, p.7). Kickbusch has consistently framed health literacy as “a discrete form of literacy” (2001, p.291) and one that is critical for social and economic development (Kickbusch 2002). She has argued that health is increasingly understood not only as the outcome of professional activities but as a resource for both individuals and

society, and thus a shared responsibility for citizens, the state and the private sector (Kickbusch, Maag and Safeer 2005).

Kickbusch has pointed to the potential for increasing gaps in global health literacy due to the rapid expansion of information technologies which offer new ways of accessing information and of learning about health. Abel (2007) has agreed with Kickbusch in contending that emerging technologies which can be applied to promoting health messages need to be assessed for accessibility and efficacy to avoid contributing to greater social inequalities and health disparities. Abel said, “health literacy interventions are basic investments in people’s general cultural capital, not only for the sake of better health outcomes but also because of increasing chances for social participation and self-directed action” (2007, p.61). He argued that health literacy efforts need to be directed, first and foremost, to populations who are least likely to have adequate levels of literacy and health literacy.

In a recent article, Pleasant and Kuruvilla (2008) suggested that a comprehensive approach to health literacy can include both clinical and public health approaches. Even though there are varying definitions and conceptual approaches, they suggested that, “both clinical and public health approaches tend to focus on some aspects of an individual’s ability to find, understand, evaluate and put information to use to improve decision making related to health and, ultimately, improve health and /or reduce inequities” (p.153). In particular, they also argued that clinical and public health approaches offer different ways of conceptualizing the relationship between knowledge and health literacy. Most definitions have focused on health literacy as the ability to acquire and use information with less

clarity with regard to the notion of knowledge as a component of health literacy. The IOM report (2004), however, referred to cultural and conceptual knowledge as a component of health literacy. Nutbeam (2000) also included health-related knowledge as a potential measure of health literacy. According to Pleasant and Kuruvilla, the public health approach recognises knowledge as an integral part of health literacy, whereas a clinical approach considers knowledge as a resource for individuals but not necessarily as a part of health literacy. They suggested that health literacy tends to be related to knowledge and that health literacy is thus, “a skill-based process individuals can use to identify and transform information into knowledge” (2008, p.154). In supporting this claim, they referred to findings from a review by Pignone et al. (2005) showing that only two of 16 studies did not find a statistically significant relationship between measures of literacy or health literacy and health knowledge. Baker (2006) has pointed to confusion arising from various perspectives on knowledge as a component of health literacy and the difficulty in measuring health literacy without agreement on the underlying construct. Broadening the frame for looking at health literacy beyond the medical model to include public health perspectives has fuelled much of the debate in the literature as discussed later in this chapter.

Nutbeam has been one of the strongest advocates of a public health approach to health literacy. His health literacy model is described next.

2.2.3.1 Nutbeam’s model of health literacy

According to Nutbeam (2000), the potential of education for social change has been lost in contemporary health promotion as interventions tend to be “done ‘on’ or ‘to’ people, rather than ‘by’ or ‘with’ people” (p. 265). He has argued for

practices which move beyond transmitting health-related information to ones which enable individuals to develop the knowledge and skills they need to use information for their health. In developing his health literacy model, Nutbeam drew on ideas from the fields of literacy, adult education and health promotion (Nutbeam 2008a). Nutbeam's model for health literacy centres on three levels of literacy which he said, "progressively allow for greater autonomy and personal empowerment" (1999, p.50). These three levels include basic/ functional, communicative/interactive and critical literacy as seen next.

Basic/functional literacy is characterized as "sufficient basic skills in reading and writing to be able to function effectively in everyday situations" (Nutbeam 2000, p.263). Functional health literacy reflects the outcome of traditional health education approaches which focus on the transmission of factual information such as health risks and using health services (Nutbeam 1999). According to Nutbeam, functional health literacy is compatible with the narrower definitions of health literacy commonly referred to in the literature which focus on application of basic literacy skills within the health care setting. These definitions tend to emphasize compliance with medical instructions. This approach to health literacy is in keeping with the idea of literacy as a concrete set of acquired cognitive skills.

Communicative/interactive literacy refers to "more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday activities, to extract information and derive meaning from different forms of communication, and to apply new information to changing

circumstances” (Nutbeam 2000, p.263-264). Here, an interactive health literacy⁶ approach means enhancing the capacity of individuals to act independently on knowledge, in particular through improvement in their motivation and self-confidence. Nutbeam said that this approach reflects the emphasis on the development of personal skills in a supportive environment which has evolved in the field of health education over the last couple of decades. Whereas he suggested that outcomes of efforts to enhance interactive health literacy primarily accrue to individuals through their improved capacity to act independently on knowledge, there may also be social benefits through their improved capacity to influence social norms and interact with social groups.

Critical literacy encompasses “advanced cognitive skills which, together with social skills can be applied to critically analyse information, and to use this information to exert greater control over life events and situations” (Nutbeam 2000, p. 264). There are two traditions of criticality embedded in the notion of critical health literacy—one of critical appraisal (i.e. of information) and one of emancipation. Nutbeam emphasized the latter, saying that critical health literacy moves beyond the communication of information to the development of skills needed to effect social change. He said that critical health literacy is linked more to population than individual benefits, and is directed to improving individual and community capacity to address the social and economic determinants of health. Although Nutbeam noted that in practice efforts consistent with enhancing health literacy are typically based on a mixture of these three levels of literacy, critical health literacy was the least commonly applied.

⁶ I am following Nutbeam’s example in referring to communicative/interactive health literacy as interactive health literacy.

Nutbeam (2000) suggested that progression between these three levels of literacy depended not only on individuals' cognitive development but also their exposure to information, i.e. what information is and how it is presented and, in turn, by how they respond to the communication. Responses are mediated by one's personal and social skills and level of self-efficacy. There is an assumption that one needs to be functionally literate to apply interactive and critical health literacy skills. Nutbeam has recently questioned the progressive nature of these three types of literacy (personal communication January 9, 2008). This is an issue which needs further discussion in the literature based on empirical findings.

In his 1999 and 2000 articles, Nutbeam cited Freebody and Luke (1990) as the source of the tripartite literacy typology underpinning his health literacy model. Nutbeam appeared attracted to their categorization of literacy because it serves "not only as measures of achievement in reading and writing and comprehension, but more in terms of what it is that literacy enables us to do" (Nutbeam 1999, p.50). In the article that Nutbeam cited, Freebody and Luke (1990) applied their literacy typology by examining components of literacy success in school-based reading development programmes. They argued that "literacy is a multifaceted set of social practices" (1990, p.15) and that one aspect of literacy should not be given priority over another. They said that it is "not whether a 'basic skills', a 'communicative', or a 'critical' approach to literacy instruction is most appropriate or necessary, but rather that each of these general families of approaches displays and emphasizes particular forms of literacy" (1990, p.7-8).

In a later article, Freebody and Freiberg (1997) discussed the difficulty in constructing the *problem* of literacy and health. They framed literacy not solely as a set of distinct skills, but literacy as embedded within social and political interactions. Echoing the New Literacy Studies mentioned earlier, they argued that “a view of literacy as everyday communicative practices, necessarily embedded in the relationships and politics of everyday social life, offers new orders of interest and ways of thinking about literacy and health” (Freebody and Freiberg 1997, p.3). Although Freebody and Freiberg mostly discussed the relationship between literacy and health, they also referred to health literacy as “the set of practices that enable a person to develop, understand and critically act on a growing literacy-based knowledge of health issues— prevention, diagnosis, treatment and the impact of life-style factors” (1997, p.4).

One can see the influence of these authors on Nutbeam’s approach to health literacy. The similarities extend the understanding of literacy beyond the one-dimensional concept of literacy as a distinct set of basic skills in reading and writing to the notions of interactive health literacy and critical health literacy. Their collective approach to literacy favours capacity building, not a deficit approach to literacy (Quigley 1997; Quigley 2006) and thus is consistent with a public health approach to health literacy, according to Nutbeam.

Neither Freebody and colleagues nor Nutbeam have discussed the philosophical underpinnings of this tripartite model of literacy. Tones (2002) has speculated that “Nutbeam’s use of the word ‘critical’ presumably derives from the concept of Critical Theory and is thus concerned with the imperative to create social and

political change, e.g. to address problems of inequity and social justice” (p.289). Tones further suggested that both interactive and critical health literacy “might contribute to critical/emancipatory health education strategies needed to achieve positive change” (p.289).

I suggest that there are parallels between the literacy typology underpinning Nutbeam’s health literacy model and Habermas’s identification of three forms of knowledge. Continuing Tone’s observation on Critical Theory, according to Brookfield (2005a) Habermas has been the contemporary theorist who has contributed most of the Critical Theory discourse to the field of adult education—a field of practice and study upon which Nutbeam largely drew in developing his model.

In his theory of critical knowledge, Habermas (1968) argued that people relate to the world and to one another through three distinct forms of knowledge: empirical or technical knowing, hermeneutic or communicative knowing, and critical or self-reflective knowing. Starting with the fundamental concepts of labour, interaction and domination, he identified three ways of knowing which reflect technical control, understanding and emancipation. He said that these three forms of knowledge, in turn, are characteristic of three types of disciplines: the empirical-analytic sciences, historical-hermeneutic sciences, and Critical Theory. These three ways of knowing are in keeping with Nutbeam’s notions of functional health literacy, interactive health literacy and critical health literacy. Functional health literacy’s focus on the technical skills of reading and writing to enable people to understand factual information is congruent with knowledge reflecting

technical control. Interactive health literacy is consistent with Habermas's notion of enhanced understanding through interactive communication, and critical health literacy is in keeping with an emancipatory approach to social action in addressing the social, economic and environmental determinants of health—all three paralleling Nutbeam's framework.

Application of Habermas's three forms of knowledge in analyzing public health and health promotion policy change can be found in the literature. Bryant (2002), for example, referred to instrumental or traditional scientific knowledge, interactive knowledge and critical knowledge as differing ways of knowing that people bring to health policy change. She suggested that instrumental knowledge "is usually created by experts and systematically developed through 'scientific' methods" (p. 92) whereas interactive knowledge is derived from "lived experience acquired through dialogue and information sharing among members of a community" (p.92). She also referred to the influence of critical knowledge in addressing the powerful socioeconomic and political forces on society: "Critical knowledge considers questions of right and wrong, analyses existing social conditions, and outlines what can be done to alter social conditions to improve quality of life" (p.92). I would suggest that a gap in the literature is the limited discussion of philosophical underpinnings of health literacy, in particular with respect to Nutbeam's model which has been more widely embraced in theory than in practice. I would also suggest that Nutbeam's focus on empowerment has been considered a radical addition to the health literacy discourse.

The priority Nutbeam places on personal empowerment and capacity building is, however, consistent with health promotion thinking in such landmark documents as the Ottawa Charter for Health Promotion (1986). Nutbeam argued that “improved health literacy is critical to empowerment” (2000, p. 259) and that empowerment can be achieved by improving one’s capacity to access and use information effectively. His assertion that information can be used to “to exert control over life events and situations” (2000, p.264) builds upon an idea of empowerment directed not only to individual action but also to social and political change. This approach reflects an extension of practice beyond the transfer of information to the development of skills to effect organizational change and critically identify social, economic and environmental determinants of health. This view of health literacy implies an emancipatory notion of change inherent in the concept of health promotion emanating from the Ottawa Charter for Health Promotion (1986) and reflects understandings of health promotion adopted by the WHO (Nutbeam 1998). Nutbeam stated that his notion of critical health literacy built on the idea of ‘critical consciousness’ which is derived from the emancipatory adult education and participatory empowerment philosophy of Paulo Freire (1973), a philosophy of practice well rooted in the adult literacy field. Practice which invites interaction, participation and critical analysis are characteristic of a Freirean approach to adult education and the work in the field of adult literacy that has followed and built upon this philosophy (Quigley 1997; Quigley 2006).

Nutbeam has called for health literacy practices that are more consistent with principles of adult education (Renkert and Nutbeam 2001). In particular, three

adult education principles have been emphasized by Nutbeam. These include: valuing experiential knowledge as a resource, understanding the influence of the context in which health decisions are made, and respecting autonomous decision making that promotes independent thought and the action of clients (Nutbeam 2008b). Although Nutbeam has not given specifics about how these principles can be integrated into practice, he has urged health practitioners to develop and apply adult learning approaches in their interactions with clients, citing Imel (1998) as a source for information on basic adult learning principles in adult literacy education and suggestions for practice.

Nutbeam's model for health literacy also draws from various theories which have contributed to health promotion thinking over the last several decades. For example, his focus on motivation and confidence as key aspects of interactive health literacy is closely tied to the idea of self-efficacy—a concept which emerged through the health education and promotion literature in the 1980s and early 1990s. As Smith (2006) explains, “Perceived self-efficacy refers to beliefs that individuals hold about their capacity to carry out actions in ways that will influence the events that affect their lives” (p. 343). Nutbeam claimed that interactive health literacy is intended to lead to “improved capacity to act independently on knowledge, improved motivation and self-confidence” (2000, p.265). He suggested that practitioners should use more personal forms of communication in an effort to help people develop confidence to act on knowledge and to enhance their ability to work with and support others.

Although he has been influenced by various fields in developing his health literacy model, Nutbeam (2008a) has admitted that the incorporation of adult education and health promotion principles in health literacy initiatives is lacking. I now examine the extent to which the literature reveals reports of how Nutbeam's model has been applied.

2.2.3.1.1 Operationalisation of Nutbeam's model

Whereas functional health literacy has been the prime focus of health literacy research and practice initiatives, there is little evidence in the literature of the operationalisation of the concepts of interactive and critical health literacy. In general, there has been a welcomed response to Nutbeam's rethinking of health literacy, but little evidence to guide practice. In their preliminary examination of antenatal education practices, Renkert and Nutbeam argued that the "health literacy concept offers us the opportunity to shift our thinking in antenatal education away from the simple transfer of knowledge, to a more active process of empowering women for parenthood" (2001, p. 388). Despite urging practitioners to shift the focus of their practice from information transfer to enabling the development of mothers' skills and confidence in using information to make healthy choices, Renkert and Nutbeam offered few guidelines for enhancing maternal health literacy. They admitted, however, that changing ways of practice is challenging.

Others have used Nutbeam's model of health literacy as a framework for examining various health promotion interventions. For example, Gray et al. (2005) applied Nutbeam's three dimensions of health literacy in their

identification of challenges that adolescents in the UK and US experience when accessing information using the Internet. Using Nutbeam's model as a framework, St. Leger (2001) proposed strategies for health promoting schools in Australia which address all three areas of health literacy. In Israel, Levine-Zamir and Peterburg (2001) used Nutbeam's framework in examining health care practices related to informing patients about diabetes and chronic disease self-management. Wang (2000) applied the notion of critical health literacy in a case study related to the prevention and control of an intestinal parasitic infection in China. Jahan (2000) reported on the application of Nutbeam's three levels of health literacy in the prevention of diarrhoeal disease in Bangladesh. When referring to critical health literacy, reports in the literature have tended to reflect a critical appraisal, not an emancipatory approach. According to Nutbeam (2000), programmes directed at achieving critical health literacy with a view to changing policy and organizational practices were the least likely applied in practice.

Turning from Nutbeam's model, I now describe a second public health approach to health literacy. This one has been proposed by Zarcadoolas, Pleasant and Greer (2006) and builds on Nutbeam's approach.

2.2.3.2 An expanded framework for health literacy

In contrast to the more linear nature of Nutbeam's tripartite model depicting three progressive levels of literacy⁷, the model of Zarcadoolas, Pleasant and Greer (2006) represents health literacy as multidimensional and dynamic. These authors drew upon a body of knowledge informed by diverse fields of practice including

⁷ As noted on page 37, Nutbeam has moved away from referring to these three types of literacy as 'progressive levels'.

sociolinguistics, literacy, media studies and health communications. Their model reflects an understanding of literacy as social practice.

Zarcadoolas, Pleasant and Greer (2006) suggested that the health literate person must develop multiple skills, including skills in critical appraisal, to meet the ongoing information demands of contemporary daily life. They have pointed to the potential for sustainability of health literacy among people who learn from their experience as they apply their health literacy skills to meet new challenges and changing contexts. The idea of generativity is central to their notion of health literacy. As they explain:

This generativity is what makes health literacy sustainable and enables health literate people to make more informed decisions, to benefit from healthier choices, and to have degrees of independence from experts and knowledge intermediaries. When people have a good degree of health literacy, they know how to seek out, access, judge, and use information about their health. They are also better able to know what they can discard as outdated, unrealizable, or simply wrong (Zarcadoolas, Pleasant and Greer 2006, p.67).

This idea of literacy as the ability of individuals to apply existing knowledge and skills to new situations is consistent with the findings from the New Literacies Studies which have shown that once people learn a particular literacy they have tools to learn another (Ewing 2003). According to Zarcadoolas, Pleasant and Greer, health literacy ability develops over time as one encounters new experiences which must be informed by new concepts and knowledge and through interactions with different providers of information. Depending on the context, individuals draw upon various types and sources of health information. The impact of health literacy is seen not only within the health setting, but throughout activities of daily life in the home, work and other settings where individuals make decisions which impact on their health. Canadians, for example, use many

sources of health information. Family physicians have been reported to be the most frequently cited source, but this is closely followed by the media, friends and family, books and the Internet (CCL 2006).

This idea of generativity is implicit in Nutbeam's contention that the advanced literacy and social skills of interactive health literacy can enable one "to extract information and derive meaning from different forms of communication, and to apply new information to changing circumstances" (Nutbeam 2000, p.264). Like Nutbeam, Zarcadoolas and colleagues have embraced the idea of health literacy as strengthening an individual's capacity to act autonomously on information they receive.

Although the model proposed by Zarcadoolas et al. can be considered to complement Nutbeam's health literacy typology, it considerably widens the scope for exploring health literacy through the idea of the plurality of literacy and the integration of concepts and worldviews which address the influence of science, culture and politics on health at the individual, community and global levels. These authors viewed health not solely from the perspective of the abilities of patients and consumers of health information as suggested in earlier definitions of health literacy, but rather "as an issue for health providers, health educators and communicators, adult education, and the public alike" (Zarcadoolas, Pleasant and Greer 2006, p.72). Like Nutbeam (2000) and Kickbusch (2005), they emphasized the critical role of providers and their interaction with individuals in creating a more health literate population and society. Zarcadoolas, Pleasant and Greer

(2006) have applied their expanded model to a number of issues relevant to public health as discussed next.

2.2.3.2.1 Operationalisation of expanded framework

In their book, *Advancing Health Literacy: A Framework for Understanding and Action*, Zarcadoolas, Pleasant and Greer (2006) outlined several applications of their framework to various health communication issues. Each case study highlighted a different domain of health literacy as discussed in their model. As noted earlier the four domains they put forward are fundamental, scientific, cultural and civic literacy. The example most pertinent to this thesis is a prenatal health education programme entitled the *Baby Basics Program*⁸. It was designed to address health disparities and poor birth outcomes of underserved women with low literacy in the US.

The *Baby Basics Program* was developed with health literacy principles in mind and had a particular focus on the fundamental or basic literacy concerns of the intended audience. Health and education practitioners were involved in its development. Special materials were developed and all staff participated in health literacy and cultural competency training. Community-wide interventions were coordinated across health, education and social services. Preliminary findings for programme evaluation revealed that women participating in the Baby Basics Program were more likely to return for follow-up. The authors suggested that women's adherence to recommendations regarding return visits was a positive

⁸ The Baby Basics Program was developed through the What to Expect Foundation : http://www.whattoexpect.org/about_us

outcome of the interventions undertaken to enhance their health literacy (Garbers 2007).

In this section of the review of literature, I have focused on descriptions of health literacy which reflect a public health approach with special attention to the models proposed by Nutbeam and by Zarcadoolas, Pleasant and Greer. Although there has been growing enthusiasm for the concept of health literacy, it has been tempered with scepticism. Concern has been raised about the diversity of definitions and lack of a universal definition of health literacy. Criticism has also been directed at the various approaches to describing health literacy. I discuss some of these concerns next.

2.2.4 Contesting the concept of health literacy

Many authors have pointed to the lack of common understanding of health literacy and the problems posed by various definitions (McCray 2005; Baker 2006; Logan 2007; Speros 2005). In his discussion of the meaning and measure of health literacy, Baker has said that “the lack of a shared meaning for the central term in a field is obviously problematic” (p.878). Speros argued that there was a need for greater clarity in the meaning of health literacy and for more consistency in using the concept in her field of nursing. Logan concluded from findings from an on-line survey of medical librarians and health care professionals that there was considerable potential for disagreement on health literacy among professionals. He suggested that different understandings of health literacy stemming from competing frameworks could be a source of resistance to its use among professionals (Logan 2007). Masinda (2007) pointed out the special problems

with health literacy terminology in the French language. She said that confusion in Canada and Europe flowed from different uses of the terms ‘health literacy’ and ‘health education’. She argued that not only was there a need for more in-depth debate about the concept of health literacy in the Francophone world, but that more consideration should be given to framing health literacy with respect to the community rather than the individual level.

Functional health literacy has been a particular focal point for criticism. The traditional medical approach to health literacy has been criticized for privileging scientific evidence and medical expertise, and for its focus on striving for patient compliance with advice received. In referring to the US health care system, Cuban (2006) argued that the focus on functional health literacy reflected a shift in responsibility for health care away from the health system towards the individual. She said that too much attention has been directed to the literacy skills that individuals need to read health information with not enough concern given to social class and racial disparities. Cuban has been highly critical of the emphasis that proponents of functional health literacy place on compliance with advice provided. She argued that while functional health literacy is positioned as a means of addressing disparities within the American health system, its individualistic focus may undermine other policies which serve to address disparities—and may, in fact, contribute to social disparities. In her view, “The problems of low literacy and health are not viewed as part of systemic discrimination, but in terms of people’s individual skill levels” (p.6). Individuals limited in literacy who do not comply with expert advice may be seen as laggards who are deficient in cognitive and communication skills and a burden on the system. Moreover, for her, “Both functional and interactive health literacy focus on developing people’s

information-seeking skills and their ability to act on medical advice, as well as influence social norms” (p.4). She argued that interactive health literacy, through its focus on practitioners’ personal interaction with individuals, is not unlike functional health literacy in that it too emphasizes the transmission of facts and adherence to prescribed actions. It is too easy to blame the victim in these approaches.

According to Woolf et al., one of “the great ironies of the modern health care system is how poorly it delivers knowledge at a time when society enjoys unprecedented access to information” (2005, p.293). They contended that although many individuals want to be educated about their options and to participate in decision making, the system and providers within it may not be “equipped to inform patients in a manner that is timely, easily understood, and jargon-free, nor does it encourage people to consider consequences, to ask questions to clarify values, and to express preferences” (p. 295). Woolf and colleagues suggested that health information needs to be coupled with high-quality decision counselling to help individuals select their best option.

According to Bissell, May and Noyce (2004), the issue of compliance is central to both medical and public health practice as it pertains to the tendency for professionals to attribute blame to people when their actions do not match the expectations placed on them. Practitioners find it difficult to strike a balance between encouraging individuals to adhere to advice provided and fostering their personal autonomy by respecting their independent thought and action. To address this practice dilemma, the Royal Pharmaceutical Society (Mullen 1997)

introduced ‘concordance’ as a notion which contrasts with compliance. Concordance is considered “the middle ground between informed choice where decisions are left entirely to the patient and traditional, paternalistic medical decision making” (Jordan, Ellis, and Chambers 2002, p. 383). It reflects a more patient-centred approach to shared decision making. Gray (2003) has argued that promoting health literacy is crucial to enabling concordance with pharmaceutical advice. Bissell, May and Noyce said that “health care relationships should be understood as a space where the expertise of both patients and health professionals can be pooled to arrive at mutually agreed goals” (p.851). Ellis and Chambers (2002), however, pointed out that although agreement may exist between the patient and the professional, it does not always extend to the final decision. One might expect that practitioners who control patient access to an intervention, such as a medication or clinical treatment, to have some degree of leverage in the decision-making process. Practitioners who advise on lifestyle-related behaviours are unlikely to have much control over the final decision. Issues of compliance and concordance, although not extensively addressed by Nutbeam in his public health approach to health literacy, appear to be worthy of more consideration especially with respect to the notion of interactive health literacy which is intended to strengthen capacity for individuals to act on information provided.

Within the field of health promotion, Tones (2002) has appeared as the most outspoken opponent of Nutbeam’s “reinvented concept of health literacy” (p. 289). He suggested that Nutbeam has incorporated in his model “all of the major psychological, social and environmental constructs that influence individual health choices!”(p.289). Based on a review of health literacy definitions presented

in a bibliography published in the US (Selden et al. 2002), Tones concluded that the definition of health literacy “frequently considers the ability to understand health communications as the first step leading to the ultimate goal of patient **compliance!**” (p.287) [emphasis in original]. He questioned the wisdom of widening the concept of health literacy beyond its original intent when there was no apparent need for new terminology and suggested that Nutbeam’s model, indeed, may be counterproductive.

Tones has been particularly critical of Nutbeam’s use of interactive literacy and critical literacy. He claimed that there was already a body of theoretically sound literature from the psychological and education disciplines to guide practice. In his opinion, using the term ‘literacy’ to describe competent social interaction was inappropriate. Furthermore, he said that this notion had already been adequately described by the term ‘social interaction skills’. He declared that Nutbeam’s definition of health literacy had moved so far from the original notion of functional health literacy that it had “almost become synonymous with the concept of empowerment, i.e. the central principle underpinning all health promotion” (p. 289). In his opinion, skills for critical literacy have been better described within the fields of cognitive and social psychology since, in his view, critical thinking pertains to problem solving and decision making. Tones contended that there are adequate health education strategies—such as those rooted in the thinking of Paulo Freire—to address social and political change.

Many other authors have claimed that fundamental problems in the field of health promotion are the result of a lack of critical reflection on theoretical premises

underpinning health promotion (McQueen and Kickbusch 2007, O'Neill et al. 2007). Caplan (1993) argued that within health promotion, like other fields which focus on social intervention and have drawn heavily from the social sciences, descriptive models are often considered as theory. He suggested that a lack of evaluation of models adopted for health promotion and limited understanding of their theoretical underpinnings have resulted in confusion about what models one should apply and why. For him, “all this confusion is a failure to spell out more precisely what it is one means by health education/promotion, and more importantly what one is doing when one claims to be practising health education/promotion” (p.148). For such authors, Nutbeam’s health literacy model may well exemplify this difficulty.

Despite the criticism directed at health literacy, there are many proponents of the redefinition of health literacy beyond its focus on functional literacy. Kickbusch has unequivocally supported the expanded meaning of health literacy (Kickbusch, 2001; Kickbusch, 2002; Kickbusch, 2004). She has centred the health literacy debate on the conflict between a deficit approach characteristic of functional health literacy and the capacity building approach which she and Nutbeam have supported. She has contended that the current debate about health literacy is part of the evolution of health promotion from an individualistic disease-based model to a population-based socio-environmental orientation. Kickbusch described, “the debate around health literacy, social capital and social gradients (irrespective of whether these terms are perfect or not) as an expression of the search that is underway in the health promotion arena to emancipate itself from categories that

belong to another era, another mind frame and another ontological tradition”
(2002, p.2).

Rootman, Frankish and Kaszap (2007) have acknowledged that there are camps for and against health literacy within the field of health promotion. There are opponents led by Tones and enthusiasts led by Nutbeam and Kickbusch. Although they claimed that the enthusiasts are gaining ground, they have suggested that those with counterviews warrant attention. They said, “At the minimum, we need to acknowledge that the concept of health literacy is not the answer to all of our problems as a field, but is perhaps a useful tool for addressing some of them” (2007, p.69). Rootman and colleagues have initiated international dialogue and cross-border collaborations to further efforts in defining and measuring health literacy. They suggest that there is “evident need for work beyond the conceptual” (Rootman, Frankish and Kaszap 2006, p.69). The development of means of measuring health literacy is seen as critical to facilitating further examination of both the determinants and consequences of health literacy in Canada and internationally (Rootman and Ronson 2006; Rootman and Gillis 2007). According to Rootman and his colleagues, improved measurement of health literacy outcomes will help resolve what is largely now an ideological debate.

While the debate with respect to defining the concept of health literacy continues to be lively, there is also much attention in the literature directed to its measurement. Without evidence supporting the extent to which low health literacy is in fact a population health problem, practitioners are unlikely to recognise it as a concern within the populations to whom they direct health relevant information

and services. Moreover, according to the literature, practitioners are looking for ways to determine if clients within their practice settings have literacy difficulties and are searching for effective health literacy assessment tools (Baker 2006). The measurement of health literacy is pertinent to this thesis as it relates to the extent to which health literacy is recognized as an issue of concern to practitioners as it relates to their promotion of breastfeeding.

2.2.5 Identification of low health literacy in practice

The literature suggests that practitioners lack the confidence and tools for identifying and addressing low literacy, and low health literacy, within their practice (Davis and Wolf 2004). Identification of literacy levels of patients and clients in health care settings has claimed the attention of American medical researchers and practitioners. According to Davis and Wolf, when physicians become more aware of health literacy, they want a “quick way to identify patients” (2004, p.597). Authors have pointed to the urgent need for better measurement tools (e.g. Baker 2006; Schlichting et al. 2007).

A number of health literacy screening tools have been developed for use in clinical settings. Two commonly used measures of health literacy applied in clinical settings are the Rapid Assessment of Literacy in Medicine (REALM) test, which measures one’s ability to read health terms (Davis et al., 1993) and the Test of Functional Health Literacy in Adults (TOFHLA), which measures ability to understand health information such as appointment slips and consent forms (Parker et al. 1995). These tools have been criticized for their focus on reading ability. They have been used mostly in American studies and according to Rudd et

al. “offer approximations of reading skills and do not test health literacy” (2007, p.188). Other tools include a shortened version of TOFHLA called STOFHLA (Baker et al.1999), the Newest Vital Sign which is based on questions about a nutrition label (Weiss et al. 2005), and the use of brief questions about clients’ level of confidence with the written word (Chew, Bradley and Boyko 2004; Wallace et al. 2006). These tools emphasize assessment of reading comprehension. In essence, they are screening for level of literacy skills, not health literacy.

Although practitioners have called for “health literacy” screening tools, there is considerable controversy about the merits of screening. For example, Shohet (2004) has questioned the value and ethics of such testing. She has argued that the anticipation of being tested may deter individuals from accessing health care because of the stigma associated with low literacy skills. A recent report by Paasche-Orlow et al. (2007) concluded that there was little evidence supporting “health literacy” screening but considerable potential for harm because shame can be associated with low literacy. They claimed that imposing a perceived testing barrier can alienate individuals from their practitioners and health care itself.

The challenge that health practitioners have in identifying when individuals have literacy difficulties is clearly connected to the social stigma associated with low literacy (Parikh et al.1996; Wolf et al. 2007). Individuals may be reluctant to disclose their literacy difficulties to health practitioners and, moreover, signs of low literacy can be both hidden and non-specific (Kefalides 1999). Parikh et al.

(1996) emphasized the shame associated with low literacy in their health literacy study with inner city patients in the US:

Shame is very personal and often times unspoken; it is a very complex and painful emotion of individuals who feel inadequate and exposed. Because shame is so painful, its source is often denied or disavowed. These leads to a profound secrecy about shame and the perceived defect giving rise to it (Parikh et al.1996, p.34).

According to Erlen (2004), individuals who have low functional literacy may feel oppressed by health practitioners and their sense of personal autonomy may be threatened. Stuber (2008) suggested that there is a great urgency to understand more fully how social stigma and prejudice relates to health and the implications for public health practice. The need to increase practitioners' awareness of social stigma associated with low literacy and implications for improving health literacy practice has been recognised in Canada (Rootman and Gordon-El-Bihbety 2008; Gillis, Quigley and MacIsaac 2005; Rhymes 2008). The issue of health literacy screening within the health setting is likely to continue to be a source of considerable debate among researchers and practitioners.

Next I look at the extent to which health literacy is recognized as a population health concern in Canada.

2.2.6 Low health literacy as a problem in Canada

Informed by findings from recent analysis of health literacy measures and consultation with a wide range of policy makers, practitioners and adult learners across the country, the CPHA Expert Panel on Health Literacy concluded that "low health literacy is a serious and costly problem that will likely grow as the population ages and the incidence of chronic disease increases" (Rootman and Gordon-El-Bihbety 2008, p.41).

Recent evidence derived from the 2003 International Adult Literacy and Skills Survey (IALSS)⁹ has suggested that low health literacy is a serious population health concern in Canada (CCL 2007b). Measures of health literacy of the adult population have been developed and the extent and distribution of low health literacy has been determined in Canada and the US using international literacy survey methodology (CCL 2008; Rudd 2007 et al.; Rudd Kirsch and Yamamoto 2004). I refer to findings from this recent analysis in Chapter 3 as I describe the context for my study, including the extent and distribution of health literacy levels of the population within the health district where the study is set. In the way of background, I give a brief description of the methodology used for determining population levels of health literacy.

For the development of a population health literacy scale, Rudd and colleagues selected 350 test items containing broadly defined health content from the 2003 *International Adult Literacy and Skills Survey* (IALSS). Of these, 191 items were judged to measure health-related activities within the following health literacy sub-domains: health promotion, health protection, disease prevention, health care and maintenance, and systems navigation. These items were then used to develop a health-activity literacy scale for use in the US and Canada (Rudd et al., 2007).

Results for Canada were derived using the health-related literacy tasks from the

⁹ The International Adult Literacy Survey (IALS) was conducted in 1994 to measure prose, document and quantitative skills of Canadians aged 16 to 65 (Statistics Canada and Organization for Economic Cooperation and Development, 1995) (OECD, Statistics Canada et al. 1995). The 2003 International Adult Literacy and Skills Survey (IALSS), also referred to as the Adult Literacy and Life Skills Survey (ALLS) in Canada, was conducted with Canadians over 16 years. It included a problem solving component. Over 20,000 Canadians participated in the 2003 survey in either English or French.

Canadian component of the 2003 IALLS survey. Knowledge and skills related to three categories of literacy. Prose literacy referred to understanding and using information from texts such as newspaper stories. Document literacy referred to locating and using information contained in various formats such as a bus schedule. Numeracy referred to effectively managing the mathematical demands of diverse situations such as balancing a cheque book. The same five-level scale that was used for literacy assessment was used for health literacy (CCL 2008). The cut off of level 3 was deemed to be the minimum level of proficiency required to meet the demands of modern life.

It is important to note that for years there has been concern about the low levels of literacy among the Canadian population. Reports from the 1994 and 2003 international literacy surveys revealed that approximately 20% of Canadians have serious literacy problems and another approximately 28% have some literacy issues (Statistics Canada 1996; Statistics Canada 2005). This means that almost half of all adults (48%) were reported to have some level of low literacy challenges. Given the extent of low levels of literacy among the Canadian population combined with the increasing demands for literacy needed to function within health contexts, it was not surprising that low health literacy levels were also found to be prevalent among Canadian adults in this most recent analysis.

In the February 2008 report entitled, *Health Literacy in Canada*, the Canadian Council on Learning drew the following conclusion about the health literacy status of Canadians: “If it is assumed that, as in prose literacy, Level 3 (276-325) on the health-literacy scale is the minimum required in order to participate fairly

and fully in society, Canada has a significant percentage of adults (60%) who lack the skills to manage their health-literacy needs” (CCL 2008, p.20). The report concluded that health literacy is more complex than general literacy and that mastering health literacy tasks demands the use of prose, document and numeracy, often simultaneously. Health literacy scores were reported to increase with the level of formal education attained (CCL 2007b). Compared to those at levels 4 and 5, Canadian adults with the lowest health literacy skills were 2.5 times as likely to report being in fair to poor health, less likely to participate in a community group, and more than 2.5 times to be receiving income assistance¹⁰. These findings held when the impact of age, gender, education, mother tongue, immigrant and Aboriginal status were controlled for. The three most vulnerable populations were considered to be seniors, immigrants and the unemployed (Rootman and Gordon-El-Bihbety 2008). The strongest factor predicting higher levels of health literacy was daily reading—a finding which may have implications for practitioners searching for means to identify clients with low health literacy. Although health literacy scores varied considerably across Canadian provinces and territories, there were “a large proportion of adults in every jurisdiction with literacy skill levels that put them at risk of poor health” (CCL 2008, p.20). The extent and distribution of health literacy is considered an issue related to health disparities in Canada and has fostered a debate that is likely to increase (Rootman and Gordon-El-Bihbety, 2008).

The strengths and limitations of these findings need to be considered as they have

¹⁰ To determine the relationship of health literacy and health, results from IALLS were compared with responses to a self-reported quality of life tool (the SF-12) used by Statistics Canada.

the potential to influence policy and practices related to addressing health literacy. Several limitations to this IALLS-based health literacy scale have been reported as findings were presented (CCL 2008). According to Rootman (2008), there is limited representation of core elements of health literacy within the five health literacy sub-domains in the pool of test items. For example, there are no measures of oral fluency, reading components skills that underlie fluent and automatic reading, specialised vocabulary used in health settings, scientific literacy, or problem solving. Furthermore, broader dimensions of health literacy emerging in the current literature are not included in the measure. For example, the measure does not reflect the generativity of health literacy referred to by Zarcadoolas, Pleasant and Greer (2006) as noted earlier in this chapter. The measure may underestimate the ability of individuals to deal with a specific demand for health literacy in a situation with which they are familiar—and likewise, overestimate ability in situations which are unfamiliar and highly stressful.

It is also important to note that concerns have been expressed about the methodology and conceptual framework used for the international literacy surveys from which the health literacy measure was derived. Sticht has repeatedly questioned the construct validity of the survey tool in that performance scales are based on a theory of reading not literacy (Sticht 2001; Sticht 2005). His main criticism is that the survey methodology used essentially resulted in a measure of cognitive ability and information processing with the exclusion of prior knowledge. Sticht has also challenged the validity of the cut-off scores used to create the five levels. Further, the survey has been criticized for not adequately considering the influence of factors such as culture, language and gender

(Rootman and Gordon-El-Bihbety 2008). Despite criticism that findings from these surveys represent a limited view of literacy, and more recently health literacy, they are considered the most robust international measures available.

Criticisms raised about the appropriate use of findings concerning the extent and distribution of low literacy for policy development are likely to be extended to findings about health literacy levels. As Shohet notes, “Many policy initiatives are caught between the political demand for quantifiable, measurable outcomes, and the recognition that literacy is a complex, multifaceted issue that cuts across many domains” (2004, p.66). Shohet and others have suggested that the emphasis placed in Canada on the assessment of population literacy and health literacy reinforces the notion of functional literacy implicit in operational definitions of literacy and health literacy underlying these measures. In a review of the state of the field of adult literacy, prepared for the Canadian Council on Learning’s Health and Learning Knowledge Centre, Quigley et al. (2006) claimed that Canadian literacy organizations have tended to focus primarily on basic adult literacy skills to the exclusion of other dimensions of literacy. Based on a survey of definitions of literacy used by a sample of Canadian literacy organizations, they concluded that more emphasis was placed on basic reading and writing skills than on literacy as a social practice and referred to “the disconnect between policy, practice, research and theory” (2006, p. 11)¹¹. It will be interesting to observe over the next few years the extent to which this disconnect is reflected in efforts to advance health literacy theory and practice in Canada.

¹¹ Education and health are provincial/territorial responsibilities; there is no universal publicly funded system of adult basic education in Canada. Instead, there is a collage of programmes offered by community-based organizations or government approved school or post-secondary systems with limited funding to support learner access (Veeman, Ward and Walker 2006).

Next, I examine what the literature reveals about the effectiveness of interventions addressing health literacy.

2.2.7 Effectiveness of health literacy interventions

Little evaluation has been conducted to determine the effectiveness of health literacy interventions. Berkman et al. (2005) and Pignone et al. (2005) reported on their systematic review of the relationship between literacy and health outcomes and interventions to mitigate the health effects of low literacy. Although they found that several interventions to improve the health of people with low literacy were reported in the literature, it was difficult to draw conclusions about the effectiveness of such interventions because of limitations in study design, how interventions were conducted and how outcomes were assessed. These authors did not refer specifically to health literacy, but rather focused on reading ability. They made the following comment about health literacy: “Researchers and advocates will continue to ponder and debate what ‘health literacy’ should mean, but as yet, its measurement as a single variable eludes us” (Berkman et al. 2004, p.5).

In a review of interventions to improve health literacy, King (2007) reported that there was little evidence of evaluation. Based on interviews she conducted with key informants involved in health literacy research and evaluation in Canada and abroad, she found that there were widely differing views on the meaning of health literacy. Furthermore, many expressed their concern about the widespread confusion regarding the term. Several suggested that health care practitioners needed to become more aware of health literacy and to engage in opportunities to develop effective communication skills.

2.2.8 Recognition of health literacy as a health disparities issue

Health literacy is being increasingly positioned as a health disparities issue (McCray 2005). It has been suggested as an important predictor of health and social disparities in the US (Saha 2006). Paasche-Orlow et al. (2005) concluded from their systematic review of the literature that limited health literacy, as depicted in the medical literature, was consistently associated with education level, ethnicity, and age. They contended that efforts were needed to simplify health services and improve health education in order to address health disparities in the US. Likewise, Schwartzberg, Vangeest and Wang (2005) argued that barriers to health literacy must be addressed as part of the national goal of eliminating health disparities.

In Europe, Abel (2007) claimed that health literacy goes beyond issues of health information accessibility to notions of social capital, and that health promotion interventions have the potential to decrease as well as increase social inequality. He expressed the opinion that “High or low health literacy improves or hampers not only the health choices of individuals and their opportunities for certain health relevant behaviours, but it also promotes shared perceptions of health, attitudes and orientations often typical for different social groups” (2007, p.60).

In the background paper to the 6th *Global Conference on Health Promotion in Bangkok* in 2005, the WHO (2005) advised that it is “the responsibility of the State and governments at all levels to provide equal learning opportunities for all people to achieve basic health literacy” (p. 16). Health literacy is thus increasingly being located within the broader social, environmental, cultural and

economic conditions which contribute to health disparities and influence population health.

Canada has lagged behind many other developed countries in positioning health inequalities as a public health priority even though it was one of the first countries to identify its importance (Raphael 2007). There are profound health inequalities in Canada resulting from differential exposure to living conditions. These are often related to where people live including social and economic conditions, as well as to race, ethnic background, gender and other characteristics (Raphael 2004). In contrast to the UK where the National Health Service developed local targets for decreasing health inequalities (Department of Health 2000), the Canadian government has not made a concerted effort to address health disparities (Raphael 2008). Raphael has argued that Canadian public health workers have an essential role to play in shifting public, professional and policy makers' current focus from the dominant biomedical and lifestyle paradigm of health to one that reflects concern for the social determinants of health.

In his recent report on the State of Public Health in Canada, the Chief Public Health Officer pointed to the impact of low literacy on health as he emphasized the seriousness of health disparities in Canada (Butler-Jones 2008). This comment was in keeping with the recent report of the Expert Panel on Health Literacy which identified significant differences in levels of health literacy across regions and population groups and highlighted individual and system barriers to health literacy in Canada (Rootman and Gordon-El-Bihbety 2008). The extent to which health literacy has an independent effect on health outcomes is increasingly

becoming a question of concern with implications for practitioners in the health field as well as the field of literacy and other areas of practice.

2.2.9 Awareness of health literacy among Canadian practitioners

Despite the growing concern about health literacy as a population health issue, Canadian health practitioners are reported to lack awareness of health literacy (Rootman and Gordon-El-Bihbety 2008). Unlike physicians in the US, there has been little involvement of physicians in Canada in health literacy (Rootman 2006). Results from a survey of some 700 professionals and policy makers undertaken for the CPHA Expert Panel on Health Literacy (CPHA 2007) found that almost 30% were unaware of health literacy and only 34% said the term was used in their organizations. Although 68% reported that their organizations provided direct services, more than 30% were unsure of their clients' level of literacy. Only 7% of respondents reported that their organizations had policies on health literacy. In light of this apparent lack of awareness and concern for health literacy, the Expert Panel suggested making health literacy "a mandatory component of service provider curricula, professional continuing education, and professional registration and certification" (Rootman and Gordon-El-Bihbety 2008, p. 40).

Next, I review key literature which situates the promotion of breastfeeding as a relevant issue for the examination of practitioners' engagement with notions of health literacy.

2.3. Breastfeeding as a public health goal and priority

Breastfeeding has been referred to "an unequalled way of providing ideal food for the health, growth and development of infants" (WHO 2002, p.5). Compelling

scientific evidence supports breastfeeding as an international public health goal. Breastfeeding protects against many physical illnesses in infants including gastrointestinal infections (Dewey, Heinig and Nommsen-Rivers 1995; Kramer et al. 2001), respiratory infections (Beaudry, Dufour and Marcoux 1995), otitis media in infants (Duncan, Ey and Holberg 1993; Froom et al. 2001) and lower rates of Type 2 diabetes in later life (Young et al. 2002). There has been growing interest in the impact of breastfeeding on chronic disease prevention. Evidence has suggested that breastfeeding may have long-term benefits including lower blood pressure and blood cholesterol levels, and less prevalence of overweight/obesity and Type 2 diabetes (WHO 2008). There are also reports that cognitive development in populations of children who are breastfed is slightly higher compared to bottle-fed infants from similar environments. Evidence is not conclusive because of the strong association between breastfeeding and socio--environmental factors (Canadian Paediatric Society and Dietitians of Canada 2005). Based on their systematic review of the literature on the maternal and infant health outcomes of breastfeeding in developed countries, Ip et al. (2007) concluded that a history of breastfeeding was associated with a reduced risk of many diseases in infants (as well as mothers) from developed countries.

With the value of initiating breastfeeding firmly established in policies around the world, recent attention has turned to the length of time babies should be exclusively breastfed¹². A systematic review of evidence on the optimum

¹² Exclusive breastfeeding refers to the practice of feeding only breast milk (including expressed breast milk) and allows the baby to receive vitamins, minerals or medicine. Water, breast milk substitutes, other liquids and solid foods are excluded (World Health Organization. 2004. Geneva.).

duration of breastfeeding by Kramer and Kakuma (2001) supported the following global public health recommendation by the WHO:

Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond. (WHO, 2004, p.1).

This WHO recommendation supporting exclusive breastfeeding until six months was endorsed in Canada by Health Canada (2004) and also by professional bodies such as the Canadian Paediatric Society (2005) and the College of Family Physicians (2004). This builds on the earlier endorsement by Canadian health authorities that breastfeeding is the best way to feed babies (Canadian Paediatrics Society, Dietitians of Canada and Health Canada 1998).

The Global Strategy for Infant and Young Child Feeding, endorsed by the Fifty-Fifth World Health Assembly and the UNICEF Executive Board, positioned breastfeeding as both a natural act and a learned behaviour, emphasising that virtually all mothers can breastfeed if they have accurate information and support within their families and communities and from the health care system (WHO 2003). The Global Strategy was aimed at “empowering all mothers, families and care-givers to make and carry out fully informed decisions about feeding, free from adverse commercial information and misinformation” (WHO 2001, p. 48). One of three key objectives in the Strategy was “to create an environment that will enable mothers, families and other caregivers in all circumstances to make—and implement—informed choices about the optimal feeding practices for infants and young children” (WHO 2003, p.7). The notion of enabling informed choice has become a key concept underpinning practices directed to the protection,

promotion and support of breastfeeding around the world and has implications for health literacy.

The Breastfeeding Committee for Canada is the national authority for the WHO/UNICEF Baby Friendly™ Hospital Initiative¹³ with a mission to “protect, promote and support breastfeeding in Canada as the normal method of infant feeding” (Breastfeeding Committee for Canada 2002, p.1). The Committee’s vision states: “Breastfeeding is the cultural norm for infant feeding in Canada” (2002, p.1). In its efforts to normalize breastfeeding, it provides ongoing expert advice and recommendations on breastfeeding research, policy and programme development, and direction to governments and organizations across the provinces and territories of Canada. Informed choice is a dominant concept in the Canadian infant feeding discourse with continued advocacy for the provision of information to women to encourage them to breastfeed and for recommended lengths of time (Knaak 2005).

Despite recommendations that mothers should breastfeed their babies exclusively for six months, this goal has not been met in several developed countries, such as the UK, US and Canada. It is difficult to assess the prevalence of exclusive breastfeeding and consistent methods for monitoring breastfeeding rates across countries have been lacking. Available statistics, however, have indicated that both initiation and duration rates vary widely throughout the world (WHO, 2001). For example, reported breastfeeding rates in the UK have been the lowest in Europe (WHO 1999) and among the lowest in the developed world (Earle 2002).

¹³ The Baby-Friendly Hospital Initiative, begun in 1991, is an effort by UNICEF and the World Health Organization to ensure that all maternities, whether free standing or in a hospital, become centres of breastfeeding support.

Statistics from the 2005 Infant Feeding Survey (Bolling et al. 2007) indicated that breastfeeding initiation rates were 78% for England, 70% for Scotland, 67% for Wales, and 63% for Northern Ireland. Among mothers who initiated breastfeeding, the proportion still breastfeeding at six weeks and at six months was the same in 2005 as in 2000. Twenty-one percent of mothers were still breastfeeding at 6 months in 2000¹⁴ (Hamlyn et al. 2002; Infant and Dietetic Foods Association 2005). At the time of the 2000 survey, the recommendation for exclusive breastfeeding was four months. Levels of exclusive breastfeeding at six months were negligible across the UK as reported for the year 2005. UK rates are somewhat lower than those for the US. Findings based on 2004 data for the US indicate that 73.8 % of babies initiated breastfeeding with only 11.3% exclusively breastfeeding at 6 months (Centers for Disease Control and Prevention 2007).

In Canada, there are wide regional differences in rates of breastfeeding initiation and duration. Based on 2003 data from the Canadian Community Health Survey, 85% of Canadian mothers initiated breastfeeding with only 17 % exclusively breastfeeding at 6 months (Miller and Maclean 2005; Statistics Canada 2005). Initiation and continuation rates are lowest in Quebec (76% and 10% respectively) and the Atlantic provinces. Within the four Atlantic Provinces, initiation rates range from 63% to 77% with rates of exclusive breastfeeding until 6 months ranging from 9% to 14%. While many women breastfeed their newborns, few continue for the recommended duration. It is well established that breastfeeding is less common among less socially and economically advantaged women in Canada (Canadian Paediatric Society, Dietitians of Canada, and Health Canada 1998). In

¹⁴ No data were given for exclusive breastfeeding at 6 months.

general, Canadian reported rates of both initiation and duration are lower among women who are younger, single, with lower levels of education, with lower income, and among those living in Eastern Canada (Williams 2001).

In their analysis of data from a longitudinal study of child development in the province of Quebec, Dubois and Girard (2003a) found that adherence to recommendations related to initiation and duration of breastfeeding was low in Quebec, particularly among certain groups of women. Breastfeeding initiation and duration, along with exclusive breastfeeding, increased with mother's educational level, age and social economic status (Dubois and Girard 2003b). Mothers' education was the strongest source of influence on breastfeeding from birth to 3 months and the impact of education level increased with the baby's age. Maternal education was second in influence to maternal age when exclusive breastfeeding was examined (Dubois and Girard 2003a). These researchers suggested that more attention needed to be directed to examining the extent and impact of social inequalities on infant feeding practices and to the development of public health interventions aimed at reducing them.

2.3.1 What influences whether women breastfeed or not?

Maternal infant feeding decisions are influenced by a complex set of factors which have been widely addressed in the literature from a wide range of perspectives. What particularly stands out is the importance placed on understanding the context in which women make their feeding choices and the extent to which women have opportunities to exercise their choice.

Maclean (1990) claimed that breastfeeding is a complex activity that is ultimately connected to a woman's sense of herself and her life circumstances. Based on findings from her qualitative study with 122 Canadian breastfeeding mothers, she said that a woman's approach to breastfeeding is influenced by a wide range of psychological factors related to attitudes, values and character traits of the mother, baby, and those around them. It is also affected by structural factors such as the presence of formal or informal support systems "that cover the range from paid maternity leave, community drop-in centres, and educational programmes to community parks where mothers can meet" (1990, p. 204). Numerous cultural factors, such as norms about the purpose of breasts and gender roles, were also considered to influence how women and those around them view breastfeeding.

Maclean (1990) argued that structural realities and subtle socialization processes influence a woman's response to her breastfeeding experience. Both Williams (2001) and Maclean (1998) have suggested that insufficient milk syndrome is a likely proxy for a more complex set of interactions involving not only knowledge about the techniques of breastfeeding but also a complex set of socio-cultural issues. Maclean has emphasized the importance of looking at the broader contextual factors that are beyond the control of individual mothers.

Maclean (1998) compared findings from her qualitative study of breastfeeding experiences of Canadian mothers with findings from two national population health surveys conducted in the early 1990s. Findings from these surveys showed that mothers reported health professionals, the woman's partner and family the most influential in their infant feeding decisions. What was most striking in the

survey findings was that mothers most frequently responded that “no one” influenced them in their decision (Maclean 1998). Of those women who decided to bottle-feed, over three-quarters indicated “no one”. By contrast, Maclean’s qualitative study of breastfeeding experiences of Canadian mothers revealed that half of the women interviewed claimed that no decision was needed because there was no question of what method they would select. The other half described a more deliberate process where “they sought information from reading and talking with other women and health professionals before making their decision” (p.17). Maclean’s findings suggested that certain groups of women may be more open to health promotion strategies than other groups.

Wolf (2001) described how feeding practices in the US are continuously re-examined and revised in light of new information about health benefits and disease risks to both mother and child. Wolf (2003) has claimed that public health campaigns have been mounted to direct messages about the advantages of breastfeeding through a range of interventions to selected population groups of women within their childbearing years, using both professional and lay sources of advice. Within the Canadian context, Knaak (2005) has argued that the notion of choice of infant feeding method is particularly important today because breastfeeding advocacy plays a central role in health policy and programming. She suggested that the current infant feeding discourse does not reflect an actual choice between two comparable alternatives but rather advocates one moralized and constrained choice of breastfeeding. According to Knaak, efforts have been directed to persuading Canadian women to breastfeed rather than informing them of their choices.

Based on their study of women's infant feeding practices in the UK and from their sociological perspective, Murphy, Parker and Phipps (1998) have written about the difficulty in applying the concept of choice to women's infant feeding practices. They have commented on the appropriateness of three different dictionary definitions as they apply to women's feeding practices. The first definition, choice as deciding between possibilities, was the least problematic. According to their study findings, women did initially and periodically decide between feeding possibilities. The second definition of choice, however, was less clear cut. This notion of choice as the act of choosing entails the processes by which decisions are made rather than the actual choices themselves. Murphy et al.(1998) found that first time mothers drew on "knowledge at hand" (p.254) in making their feeding decisions. This knowledge was based either on their experiences in "typically similar acts" (p.254) or the feeding experience of others. They suggested that it was not surprising that first time mothers were tentative in their feeding choice given the lack of similar acts which are directly comparable to breastfeeding. Thus, women often reported on drawing upon the positive experiences of others. The third notion of choice as the power, right, faculty of choosing was the most problematic. In this case, there was an assumption that women have the capacity to act on what they decide is their preferred feeding method and moreover, there was an emphasis on the mother's responsibility for the outcomes of her individual choice. The authors concluded that suggesting that women's feeding choices are based on individual preference overlooks the material and social context in which they make their feeding decisions.

Several feminist researchers, for example Barlett (2003), Blum (1999) and Carter (1995), have also questioned the meaning of choice with respect to infant feeding. Like Knaak, they have challenged the pervasive use of rhetoric aimed at persuading women to breastfeed. Breastfeeding is particularly problematic, however, as a feminist issue (McCarter-Spaulding 2008). Because breastfeeding is sex-specific, it challenges the principle of gender-neutral child rearing. Whereas pregnancy stills allows the woman considerable freedom and autonomy, breastfeeding is more compromising to her independence because it requires time with the infant. Moreover, breastfeeding in contemporary Western society is not critical to child survival. There is an alternative way to feed babies that does not require the mother's participation. Breastfeeding stands in the way of liberating women unlike bottle feeding which is not dependent on the mother's presence and involvement (McCarter-Spaulding 2008).

Expert advice encouraging women to breastfeed, while grounded in scientific evidence, may carry implicit moral messages about the quality of mothering. Much has been written about the historical evolution of infant feeding practices and the significance of type of feeding as a reflection of the role of women in society and the meaning of motherhood. According to Apple (1987), expert advice related to breastfeeding has seen many changes over the last century which reflect the "complex interaction of scientific, medical, economic and cultural factors" (Apple 1987 as quoted in Murphy, 2000, p. 296). The 18th and 19th centuries have been portrayed as critical periods for the politicization of breasts and breastfeeding. Trends emerged such as children of the bourgeoisie being raised by nursemaids, the establishment of medical authority and displacement of midwives,

and the intellectual thinking of the Enlightenment that identified women as attentive mothers (Blum 1999; Apple 1995).

In her description of the maternal and child welfare movement in the UK during the early 20th century (1900-1939), Lewis (1980) situated motherhood and breastfeeding within a set of complicated and controversial social and health policies. At that time, breastfeeding was considered a normal function of women and as one writer asserted, “the woman who did not breastfeed was not worthy of the name of mother” (1980, p.69). Emerging public health programmes stressed protecting the health and wellbeing of the child within the context of the family with particular emphasis on the behaviours of mothers (Lupton 1995). Maternal education became a priority in addressing high infant mortality rates amidst widespread poverty even though many women did not have the material means to put into practice what they were taught. Although there have been trends in infant feeding, mothers have consistently been viewed as responsible for the nurturing and nourishing of their children, and the focus of health communications.

Canadian women have also historically been the target of information dispensed by health professionals as public health problems arise. They have been and continue to be held accountable for the nutritional health of their offspring. According to Ostry (2006a), the first national nutrition policies specifically related to improving the health of Canadians were developed to promote breastfeeding. He reported that although breastfeeding policies emerged in the 1920s, they were largely ignored by Canadian mothers until the 1960s. Arnup (1990) provided a detailed historical account and critique of the promotion of breastfeeding in

Canada in the first half of the 20th century until the 1960s. She contended that government generated information and professional expert advice directed to encouraging women to breastfeed was part of a government agenda placing responsibility for the nation's health on mothers (Arnup 1994). She gave the example of a Canadian public health document written for new mothers in 1921 which claimed that maintaining the family's health was the woman's responsibility: "No national service is greater or better than the work of the mother in her own home. The mother is the 'First Servant of the State'" (Sears, 1992 as quoted in Lupton 1995, p.43).

The health risks associated with bottle feeding today, however, are lower than those facing infants during the early years of the last century. At that time, bottle feeding was associated with persistently high rates of infant mortality. This situation prompted public health interventions including improved milk and water supplies, and the promotion of breastfeeding resulting in improvements in infant survival and health. Subsequently, as Ostry (2006b) explained, infant formulas were developed with bottle feeding widely marketed and public health interventions promoting breastfeeding declined. Midway through the last century the authority of the federal government as a source of infant feeding advice was displaced by "the scientific and moral authority of physicians, most of whom were uninterested or actively opposed to breastfeeding" (Ostry, 2006b, p.29). This dominant authority by the medical profession over infant feeding is still apparent. Today, for example, the College of Family Physicians (2004) has positioned Canadian family physicians as playing a key role in "providing recommended guidelines to mothers and families about infant feeding" (p.2) with the role of the

physician seen as “one of influence, authority and trust” (p.2). The College has acknowledged the woman’s right to choose the means of feeding her infant informed by “complete and accurate information” (p.2) and states the following:

Ultimately, the responsibility for breastfeeding success lies with the mother. She must make an informed decision about infant nutrition, recognizing the hazards of artificial feeding and the benefits of breastfeeding. She should be informed about how to prepare for breastfeeding and how to establish and maintain it successfully. She should be informed about the timely introduction of table foods and child led weaning practices (College of Family Physicians of Canada 2004, p.2).

There are several examples in the literature where physicians are referred to as a key source of advice to mothers on breastfeeding. For example, Sutton et al. (2007) recently reported that a lack of breastfeeding knowledge was the major barrier to breastfeeding among Vietnamese immigrants in London, Ontario and concluded that linguistically sensitive breastfeeding promotion information should be made available to them through their family physicians’ offices.

Besides physicians, public health nurses and other health practitioners play a key role in the promotion of breastfeeding in Canada. The Public Health Agency of Canada provides guidance to health practitioners regarding the promotion of breastfeeding to their pregnant clients. This excerpt is taken from the Family-Centred Maternity and Newborn Care: National Guidelines posted on their website.

During pregnancy, it is up to health care providers to ensure that families are given the opportunity to make well-informed decisions about infant feeding. They should explain that breastfeeding and formula feeding are not equivalent choices. They should ensure that women and their partners are informed about the benefits of breastfeeding and the risks of not breastfeeding. Some health care providers may avoid providing this information for fear of making a woman feel "guilty" if she chooses not to breastfeed. However, breastfeeding information should be a routine part of health promotion, along with such topics as regular prenatal care, maternal nutrition, use of infant car seats, and use of tobacco. Health care providers

also have the responsibility to accept the choices made by families—once they have ensured that the family has received accurate information (Public Health Agency of Canada 2007).

The advice given above reflects the responsibility placed on health practitioners to ensure that information on breastfeeding is provided to women—information which clearly emphasizes the benefits of breastfeeding and the risks of not doing so. The point that providers may avoid providing this information because of the guilt associated with not breastfeeding suggests that encouraging women to breastfeed is more complicated than simply transferring information that reflects current policy recommendations.

According to Murphy, Parker and Phipps (1998), “Women’s feeding decisions are not best understood as a simple endorsement or rejection of current nutritional guidelines” (p.132). In a longitudinal study of feeding practices of first-time mothers in England’s East Midlands, Murphy (1999) explored how mothers accounted for their infant feeding decisions. She found that women made decisions on how to feed their babies amidst a number of competing priorities in their daily lives and often within a social and structural context that made the decision to breastfeed difficult. Murphy made the case that women’s choices to formula feed can be interpreted as a form of deviant behaviour and that choosing not to breastfeed can threaten “women’s claims to qualities such as selflessness, wisdom, responsibility and far-sightedness all of which are widely seen as evidence of being ‘a good mother’” (1999, p. 188). In her study, some mothers who bottle-fed their babies reported feeling stigmatized because they were not able to adhere to recommendations promoting breastfeeding. Murphy pointed to the moralizing nature of expert advice directed to women by health care

practitioners with the implication that women who do not breastfeed are made to feel that they are not good mothers. Her results revealed a more complex picture of maternal choice and that “researchers, policy makers, professionals and mothers are all caught in the cross-current of complex and sometimes contradictory obligations, which means that infant feeding decisions are as much about morality as they are about nutrition” (1999, p.206).

Depending on their choice of feeding methods, women may be represented as responsible or negligent mothers— empowered or disempowered women. While they may not contradict each other, Carter (1995) has argued that “Enhancing women’s autonomy and control over their own lives presents a more appropriate feminist goal than does more, and longer, breastfeeding” (p.240). According to Carter (1995), rejection of medical advice may enhance some mothers’ feelings of autonomy. Some feminists have claimed that the promotion of breastfeeding based on a medical model discredits women’s choice about infant feeding. For example, Van Esterik (1989) made the following comment:

Breastfeeding promotion campaigns are ethically complex in that they infer that medical practitioners and institutions have the right to try and influence a mother’s private decision about how to feed her infant.This approach to educating mothers about how to feed their infant may easily slip into moralizing and blaming mothers for their infant feeding decisions (p. 150).

Hausman (2003), however, has criticized feminists for neglecting breastfeeding as women’s right and failing to advocate for public policies which address the structural constraints to breastfeeding that many women face. She argued that the trend towards scientific motherhood¹⁵ benefits the poor and socially marginalized

¹⁵ The term ‘scientific motherhood’ was coined by Apple and refers to the belief that women require expert scientific and medical advice to raise healthy children (Apple 1995).

women the least because they tend to command less respect from medical practitioners than do more middle-class mothers. Moreover, Hausman said that “scientific motherhood is less disempowering for white middle-class women, whose loss of authority as mothers can be partially made up for by other status categories, than for those women who lack other discourses of social power to rely on” (2003, p. 186). She argued that those who are more privileged should make breastfeeding possible for all women by advocating for conditions which enable all women to act on their choice to breastfeed. McCarter-Spaulding has agreed with Hausman that although breastfeeding offers many benefits, it does not represent a true choice for all women. McCarter-Spaulding said that “Breastfeeding support must go beyond information and encouragement to include political action that values women’s productive and reproductive work, women’s bodies, and their choices, and ultimately promotes and supports the value of children and families of all kinds” (2008, p.212). Maclean (1998) contended that increasing breastfeeding rates among Canadian mothers requires interventions that address both personal and structural elements that influence the breastfeeding experience. It seems, therefore, that more attention needs to be directed to addressing the conditions which determine women’s ability to act on information which encourages them to choose breastfeeding as the preferred way to feed their infants.

2.3.2 Breastfeeding promotion interventions

The literature abounds with accounts of interventions aimed at increasing rates of breastfeeding initiation and duration. For instance, a number of systematic reviews have recently been undertaken to provide some insight into the effectiveness of

various interventions/strategies (Gagnon and Barkum 2003; Lewin et al. 2003; Couto de Oliveira et al. 2001; Gagnon 2000; Fairbank et al., 1999). In recent years, many countries have developed protocols for protecting, promoting and supporting breastfeeding within primary health care in response to the WHO and UNICEF Baby-Friendly Hospital Initiative.

Of most relevance to health literacy is the systematic review reported by Couto de Oliveira, Camacho and Tedstone (2001). They reviewed 33 experimental and 31 quasi-experimental studies to assess the effectiveness of prenatal and postnatal interventions in extending duration of breastfeeding. These authors found that interventions took place in a wide range of settings including women's homes, primary health care units, hospital clinics and community venues. Although the reviewers were unable to determine from the wide variety of interventions examined which were most effective, they did identify some elements which were consistently found within successful interventions. The most effective approaches were long term and intensive. They spanned the pre- and post-natal periods and combined face-to-face information, guidance, and support.

Breastfeeding interventions involved a wide range of health professionals and, to a lesser extent, peer counsellors. Some approaches combined both professional and peer workers. There was no significant difference between the proportion of effective interventions undertaken by health professionals or peer counsellors. Only 3% of interventions used printed material alone. The dissemination of print materials on their own showed no effect and strategies with no or little face-to-face contact were ineffective.

Reporting on behalf of the Canadian Task Force on Preventive Care, Palda, Guise and Wathen (2004) presented a summary of evidence on interventions targeted at improving breastfeeding initiation and duration, or both. A lack of studies prevented them from making any recommendations regarding advice given by primary health care providers. They were able, however, to give a rating of ‘fair’ to the evidence supporting the effectiveness of peer counselling in increasing both initiation and maintenance of breastfeeding. Furthermore, there was good evidence that structured antepartum and postpartum educational programmes supported breastfeeding initiation and duration. They found no benefit when only written materials were used. In fact, their evidence supported a recommendation against providing written materials alone to promote breastfeeding—a finding that would support the finding of Couto de Oliveira and colleagues (2001).

The literature suggests that considerable attention has been given to the provision of breastfeeding information to mothers in an effort to encourage them to breastfeed. In their study of 270 women living in low-income communities in Ontario, Schwartz and Evers (1998) concluded that women needed more information about breastfeeding. They reported that although women who formula-fed their babies acknowledged the health benefits of breastfeeding, their reasons for bottle-feeding and for weaning before three months tended to be based on misinformation. These authors suggested increasing the amount of practical information on how to breastfeed rather than on its health benefits. Zimmerman (2001) found similar results in their study of low-income women in New Jersey. They reported that women who formula-fed their babies did not seek information

on infant feeding choices. Like Schwartz and Evers (1998), they suggested that practitioners should be more proactive in their counselling and education efforts.

In the UK, Murphy (1999) also found that the benefits of breastfeeding were well known by both women who breastfed and those who bottle-fed their babies. Earle (2002) concluded that although breastfeeding promotion campaigns in the UK appeared effective in educating women about the benefits of breastfeeding, they did not dissuade women from bottle-feeding once they had made their decision. This finding would challenge the assertion that more information will bring about a change in women's decisions about how to feed their babies. According to Knaak (2006), most Canadian women are aware that breastfeeding is best. She says that while many intend to breastfeed, they lack the necessary resources to "successfully undertake the work of breastfeeding" (p.412).

Although the promotion of breastfeeding is strongly supported by government agencies and health profession bodies in Canada and most developed countries, there appears to be less certainty about the most effective ways of promoting and supporting breastfeeding so that women can indeed act on information provided. The literature has tended to focus on knowledge and skills of health professionals, particularly within hospital settings. Williams (2001) reported on a review of factors that contribute to increased breastfeeding in the population of women that the Community Action Program for Children (CAPC) and the Canada Prenatal Nutrition Program (CPNP) was intended to reach. She concluded that there was little published work pertaining to workers in these community-based programmes. In the UK, evaluation of breastfeeding promotion efforts in Sure

Start programmes has pointed to the importance of peer support (Potter 2007). Potter, however, has claimed that “Improving breastfeeding rates in areas of socio-economic disadvantage requires an intensive and integrated approach” (p.89).

According to Smale et al. (2006), particular attention needs to be directed to appropriately educating and training practitioners in ways that support mothers. These authors argued that along with changes in education and practice, changes in attitudes and culture across health services and society in general are needed if goals to increase breastfeeding rates are to be met. Renfrew et al. (2006) have pointed to the complexity of breastfeeding as a public health issue and the challenge of developing effective practices when so many different disciplines and sectors are involved.

While breastfeeding is well recognised as a health policy priority, the literature suggests that much more work is needed to turn policy into effective practice.

2.3.3 Health literacy and breastfeeding

In my examination of the literature, I did not find reports of studies looking directly at the concept of health literacy as it relates to the promotion of breastfeeding. Breastfeeding is occasionally mentioned as an example of an issue as part of prenatal and parenting education and in connection with literacy levels of mothers. Although there is literature regarding literacy levels and breastfeeding in developing countries, I focused on literature more relevant to the Canadian context.

In their systemic review of the research related to literacy and health outcomes, Berkman et al. (2004) reported that only two cross-sectional studies examined levels of maternal literacy and breastfeeding. Both found a positive relationship. In a study of 646 mothers attending child health clinics in Kansas, Fredricksen (as reported in Berkman et al., 2004) found a significant association between low reading ability and never having breastfed. Kaufman et al. (2001) used the Rapid Estimate of Adult Literacy in Medicine (REALM) (referred to in section 2.2.5.1) to study the effect of functional health literacy on breastfeeding initiation and continuance among women attending a public health clinic in New Mexico. They found a statistically significant relationship between functional health literacy and breastfeeding. Mothers with higher REALM scores were more likely to breastfeed for at least two months. This study did not take into account other factors beyond or closely associated with low literacy that may influence a woman's decision to breastfeed. Moreover, the authors noted that because of the stigma attached to low literacy, women with reading difficulties might have declined to participate in their study.

Renkert and Nutbeam (2001) introduced the term 'maternal health literacy' in an exploratory study to investigate the feasibility of using the concept of health literacy to guide the content and process of antenatal classes in Australia. They defined maternal health literacy as "the cognitive and social skills which determine the motivation and ability of women to gain access to, understand and use information in ways that promote and maintain their health and that of their children" (2001, p. 381). Based on their analysis of data from focus groups and

personal interviews with both prenatal educators and childbearing women, they concluded that because of the quantity of information that was covered within the time limits of classes, little more than the transfer of factual information was accomplished. They suggested that more attention needed to be directed to enhancing interactive health literacy and the development of maternal skills and confidence to make choices that lead to healthy outcomes. In applying the notion of critical literacy to maternal health literacy, Renkert and Nutbeam suggested that “Ideally, a level of critical literacy will be reached in which an individual has the ability to seek out information, assess the reliability of the information and use it to exert greater control over the determinants of health, and make well-informed health choices” (2001, p. 382). The emphasis they placed on both interactive and critical health literacy in enabling expectant parents to make informed health choices was noteworthy.

Porr, Drummond and Richter (2006) provided a commentary on nurses’ application of health literacy as an empowerment tool for low-income mothers. They urged nurses who provide parent education during home visits to disadvantaged families to integrate Nutbeam’s notions of interactive and critical health literacy into their practice. They stated that “when promoting interactive health literacy, the nurse-advocate does not visit the low-income mother to impose upon her a model of a ‘good mother’, but strives to enhance the mother’s knowledge, skills, competence, and coping abilities to parent effectively, as best she can within the constraints of economic disadvantage” (p.333). With respect to critical health literacy, these authors claimed that the nurse-advocate “enables increasing levels of personal and community empowerment by building on the

mother's newfound self-efficacy and competence" (p.333). Little was said, however, about how enhancing critical health literacy could result in action on the economic constraints that prevent low-income women from acting on the health advice they are given.

2.4 Summary and conclusion

In this chapter, I have reviewed literature relevant to my examination of the extent to which dimensions of health literacy in the current literature are reflected in breastfeeding promotion practices. In the first part of this chapter, I outlined the evolution of the concept of health literacy and identified current debates. I also discussed concerns related to identifying clients who may have literacy challenges. I presented evidence showing the prevalence of low literacy and low health literacy in the Canadian population. As a back drop to this study, I paid special attention to literature which situates health literacy as a concept relevant to health promotion and public health practice within the Canadian context. I also highlighted recent findings which suggest that low health literacy is a population health issue of growing concern in Canada. In the second part of this chapter, I reviewed the salient literature pertaining to breastfeeding including key articles which situate the promotion of breastfeeding as a relevant issue for the examination of practitioners' engagement with notions of health literacy.

In the next chapter, I describe the methodology and methods used in my research and the context in which my study was set.

Chapter 3

Methodology and methods

3.1 Introduction

Having set out the thesis objectives at the end of chapter one (see section 1.6, p.10), in this chapter I describe the methodology and specific methods used to carry out my study. First I outline my theoretical stance and standpoint as a researcher. I then describe the research strategy adopted, the setting and context for the study, and specifics of the methods I used to collect and analyse the data. I consider the ethical concerns and some of the practical challenges I faced in conducting this research. Lastly, I address the issue of assessing the quality of evidence derived from qualitative research as it applies to trustworthiness of findings from my study.

3.2 My standpoint as the researcher

I accept that individuals have different ways of knowing and am interested in how people interpret their world. As the researcher in this study, I was compelled to engage in a high degree of reflexivity throughout the full research process. Reflexivity means “thinking critically about what you are doing and why, confronting and often challenging your own assumptions, and recognizing the extent to which your thoughts, actions and decisions shape how you research and what you see” (Mason 2002, p.5). Given that I conducted the study within a community where I have lived, worked, studied, volunteered, and raised a family, I was constantly experiencing the tension of being an insider, an outsider, and on the boundary between these roles. Throughout the entire process of inquiry, this situation required me to challenge assumptions about myself as well as those

underpinning practices that were reported to me and that I observed. A requirement in undertaking this type of research is to situate oneself within the research process and to identify one's standpoint as a researcher.

In many ways, I adhere to emancipatory values which have shaped and been shaped by my experience as a public health practitioner and adult educator, as a researcher engaged in community-based participatory research, and as a resident for more than 20 years in the health district in which this study was set. My professional life has been strongly influenced by my awareness and involvement in addressing issues related to social inequities and health disparities within rural Nova Scotia—the most recent example being a participatory research project exploring the links between literacy and health (Gillis 2007). Before and during the period of my doctoral research, I was involved in a number of national initiatives which entailed examining evidence and identifying recommendations for improving practice and policy directed to the issue of health literacy in Canada. My interest in undertaking this doctoral research stemmed largely from my commitment to advance thinking and action on health literacy within the context of public health practice and policy. It important for me to note, however, that in embarking on this study I was aware of, and tried to set aside, my emancipatory persuasions which could have easily drawn me into advocating for immediate change as I engaged in the research. In this study, my intent has been to examine practitioners' engagement in health literacy within one health district in order to identify implications for future practice and policy development based on my findings. Although a source of some personal tension, I have been attentive to my research role as one of observer, and not as an advocate for policy or

practice change. In striving for rigour in the collection and analysis of my data, my goal has been to maintain an awareness of the risk of imposing my own normative position on the data.

As a public health practitioner, educator and mother, I have had a long standing interest in the issue of breastfeeding. As a nutritionist and educator, I recognize the immense health benefits of breastfeeding and I have been involved in efforts to promote breastfeeding. As a woman who breastfed her children, I valued the experience. For years, however, I have been struck by the frequency with which mothers are judged based on their infant feeding decisions by practitioners and others. I have been particularly interested in the dilemmas that practitioners face as they promote breastfeeding to women living in social environments which are not breastfeeding-friendly. I see this as a public health issue that speaks to fundamental premises underpinning health promotion theory and practice. For me, the promotion of breastfeeding poses important questions about the role of expert advice and the capacity of women to act on the health information and advice they receive from health practitioners. These views and experiences have led me to explore how practitioners involved in the promotion of breastfeeding engage with notions of health literacy within one particular health district.

Researchers, like me, who are interested in studying aspects of health practice and policy, are increasingly turning to qualitative methods of inquiry from the social sciences to enhance their understandings of health, health behaviours and health services. As noted by Clandinin and Connelly (1998), social sciences are “concerned with humans and their relationships with themselves and

environments” (p.153) and therefore, “experience is the starting point and key term for all social science inquiry” (p.153). Qualitative research is seen to contribute to a better understanding of practice and policy issues especially within the context of wider economic, social and cultural determinants of health (Green and Thorogood, 2004). Green and Thorogood (2004) have made a distinction between the contribution of qualitative research to health studies *of* health and *for* health. My use of qualitative research is clearly *for* health in that it is intended to make a contribution to the emerging public health agenda related to health literacy and to breastfeeding promotion. Although health research has traditionally relied on the positivist approach underpinning quantitative methodology, traditions of qualitative methodologies are considered appropriate for exploring some of the complex issues characteristic of people’s engagement with health issues and their interactions with health systems and providers of care and information. Murphy and Dingwall (2003) have suggested that “One of the opportunities that qualitative research, with its distinctive orientation toward discovery, offers is the possibility of producing new perspectives and developing new terms of reference, for the investigation of health care and health care settings” (p.202).

I chose qualitative research for this study because it allows an adaptable and iterative process of inquiry appropriate for addressing health literacy, a complex concept which has yet to be fully explicated through empirical research. As noted in the previous chapter, health literacy has been conceptualized in various ways with few reports in the literature of attempts to operationalise the term through empirical inquiry. Furthermore, the rapidly expanding grey literature reflects the contested nature of health literacy as a concept appearing to be increasingly

relevant to health promotion practice and policy. As such I considered qualitative research would enable me to examine how practitioners make sense out of their experiences in promoting breastfeeding at a time when health literacy was appearing as a key health promotion concept in the literature and a focus of policy guiding practice in the health district which this study was set. Pope and Mays (1995) have contended that “The goal of qualitative research is the development of concepts which help us to understand social phenomena in natural (rather than experimental) settings, giving due emphasis to the meanings, experiences, and views of all the participants.” (1995, p. 43). Moreover, they have suggested that qualitative research “may be especially useful in looking at health services in times of reform or policy change from the point of view of the patients, professionals, and managers affected” (p.44). While there are many approaches to qualitative research, I considered a qualitative case study approach most appropriate to address my research objectives as I discuss next.

3.3 The case study as the research approach

This thesis examines whether and how practitioners incorporate notions of health literacy into their breastfeeding promotion practices. To do so, it adopts a case study approach. As such, it focuses on the single case of one rural health district in Canada where professional and lay practitioners are engaged in the promotion of breastfeeding. In this particular setting, both rates of breastfeeding initiation and population levels of health literacy are reportedly lower than in most parts of Canada and the province of Nova Scotia. Because breastfeeding is an issue that crosses diverse practice settings and disciplines—as is the issue of health literacy and its potential for being integrated into health promotion practice—insights

about health literacy pertaining to the promotion of breastfeeding are likely to resonate with practitioners in other settings. It is my assumption that a detailed analysis of how practitioners involved in breastfeeding promotion in this particular case engage with aspects of health literacy can illuminate underlying processes and issues which can be further examined as they are manifested in other settings. It is through this transferability of insights beyond the particular case, in contrast to the broad generalization of findings, that a contribution to knowledge from this qualitative study can be made.

Because I was interested in exploring dimensions of health literacy in the case of breastfeeding promotion practice within the context of the rural health district in which I lived and practiced, I chose a case study approach. According to Stake, a case study is defined not as much by the methods of inquiry used as by interest in an individual case. For him, what is prominent in a qualitative case study is an ongoing interpretative role by the researcher and not merely using a structured set of techniques. Thus, the case study as a research approach refers to both the “process of inquiry about the case and the product of that inquiry” (Stake 2005, p.444).

I embarked on this research with the assumption that the context in which breastfeeding promotion interventions were undertaken in one health district could be highly pertinent to practitioners’ engagement with notions of health literacy. Although critics of case study design contend that theoretical context-independent knowledge is more valuable than practice context-dependent knowledge, Flyvbjerg (2006) has argued that context-dependent knowledge is central to expert

activity and to the strength of the case study as a research and learning approach. As argued by Yin (2003), the case study is the method of choice when the phenomenon, such as a programme or project, is not easily distinguishable from its context. He contends that “cases studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context” (2003, p.1). My exploration of whether and how professional and lay practitioners incorporate notions of health literacy into their breastfeeding promotion practice fits these three criteria.

The case study approach was selected over other possible approaches because it was considered the most appropriate means of addressing the research questions and also for pragmatic reasons. I decided, for example, against a survey method because it would not have enabled me to explore in depth the complexities of the concept of health literacy with practitioners. For instance, it would have been difficult to ensure that the questions and language used in the questionnaire would have the same meaning to respondents as I intended. A case study approach using qualitative methods and multiple sources of data was better suited for an in-depth examination of practitioners’ perspectives and practices with respect to health literacy and their breastfeeding promotion interventions.

Initially, I had considered the possibility of applying a participatory research approach. Participatory research refers to “a systematic inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change” (Green et al. 1994, p. 1). While

participatory research was consistent with my leanings towards emancipatory health promotion and commitment to engaging those directly affected by the issue of concern in the research, I decided that this approach was not the most appropriate means to address my research objectives. Participatory research calls for participants to be engaged in determining research questions of concern to them—not questions identified by the researcher. Based on insights from my previous application of this approach in addressing the issue of health literacy (Gillis 2007), I concluded that there was a need for further exploration of practitioners' engagement with the concept of health literacy before investing in another participatory approach. Moreover, according to Macauley et al. (1999), participatory research requires sustained commitment of community partners and much negotiation between community partners and the researcher throughout all phases of the inquiry. As such, it demands significant resources and time which may exceed what the researcher is able to direct to it. While I recognized the potential benefits in advocating for changes in policy and practice related to breastfeeding promotion and health literacy offered by engaging practitioners as participants in the research process, I concluded that a participatory research design was not a tenable option for my doctoral research.

There was, however, an important element of participatory research that I thought important to retain and that was the involvement of those most affected by the issue at hand. Because mothers are the primary target of breastfeeding promotion interventions, I thought it was important to learn about their perspectives as the potential users of breastfeeding promotion information. This idea to collect data from the perspectives of both mothers and practitioners, however, was rejected as

my research objectives became more clearly focused on the extent to which *practitioners* incorporate dimensions of health literacy into their breastfeeding promotion practice. Recognizing the importance of mothers' perspectives in confirming or challenging my results from interviews with practitioners, I conducted focus group interviews with mothers participating in programs at family resource centres—centres known to be directing their services to women with a particular emphasis on including those most likely to have low levels of education and literacy. I also considered that a more in-depth examination of their views might be a useful adjunct to this study at a later date.

The methods chosen for this study were qualitative, emphasizing 'discovery' and 'flexibility of design'. These features are particularly appropriate where the aim is to gain an in-depth knowledge of a phenomenon about which little is known. The case study approach requires tapping multiple sources of data appropriate to addressing the study objectives. I identified a number of sources of data as I considered data collection methods appropriate to reaching my objectives:

- Documents such as policy statements on health literacy and on breastfeeding as well as reports on population health and demographics which could provide information about the context in which practitioners undertake their breastfeeding promotion interventions. These sources were accessible through the Internet and, in some cases, through managers and practitioners. I had also considered documentary analysis of breastfeeding publications directed to mothers. As my study objectives were directed towards examining practitioners' engagement with dimensions of health literacy, I concluded that the contribution of this data to my study was limited. I did, however, assess the readability of key breastfeeding publications intended for dissemination to expectant and new parents as I saw this as pertinent to practitioners' provision of breastfeeding

information to their clients, and thus relevant to concerns about functional health literacy.

- Records pertaining to provider-client interactions were known to exist. However, not all members of the diverse range of professional and lay practitioners involved in breastfeeding promotion charted their interventions. Moreover, because of health professionals' concerns about their client and patient rights to confidentiality, access to charts for documentary analysis was not tenable.
- Observations of practitioners' day to day work offered the possibility of indicating how practitioners integrate dimensions of health literacy into their routine practices. Observing such practices among many of these health care practitioners, particularly physicians, medical specialists and nurses, was not feasible because of their concerns about patient confidentiality and time constraints. Observation in selected practice settings, however, was possible and chosen as an appropriate way to observe the context in which some practitioners engaged with dimensions of health literacy as they promote breastfeeding.
- Talking to practitioners about how they incorporate notions of health literacy in their breastfeeding practice was one way to capture practitioners' perspectives on their experiences. Because of the difficulties accessing health practitioners by telephone during their busy workdays, telephone interviewing was not deemed an appropriate method. Rather, scheduling personal interviews with practitioners in their workplace was a more viable option. In-depth face-to-face interviews with individual practitioners served as the principal source of data. Talking with practitioners who had been interviewed, as well as a number of mothers of infants, through focus group interviews also provided feedback on preliminary findings.

“All research depends on collecting particular sorts of evidence through the prism of particular methods, each of which has its strengths and weaknesses” (Mays and Pope 1995, p.109). The methods of data collection used in this qualitative case study, including their advantages and limitations, are described in further detail in section 3.5. It is important to note that multiple methods of data collection were not chosen for what is commonly described as the intent of triangulation, i.e. for gaining an accurate reading of the issue from different sources of data with the implication that there is one objective reality. Mays and Pope (2000) caution against assuming that by applying the concept of triangulation, “the weakness in one method can be compensated for by the strengths in another” (p.51). They argue that rather than being considered a genuine test of validity, triangulation should be viewed as a way of “ensuring comprehensiveness and encouraging a more reflexive analysis of the data” (p.51). My rationale for using multiple methods was based on an assumption that multiple methods would enable me to explore my research issue from different perspectives and increase the likelihood of capturing a wide range of viewpoints on practice including outlying ones. The methods I chose were intended to help me achieve the “ “thick descriptions”, “experiential understanding”, and “multiple realities” ” that Stake (1995. p.43) has stated are expected in qualitative research. As Mason (2002) pointed out, “the concept of triangulation—conceived as multiple methods—encourages the researcher to approach their research question from different angles, and to explore their intellectual puzzles in a rounded and multi-faceted way” (p.190).

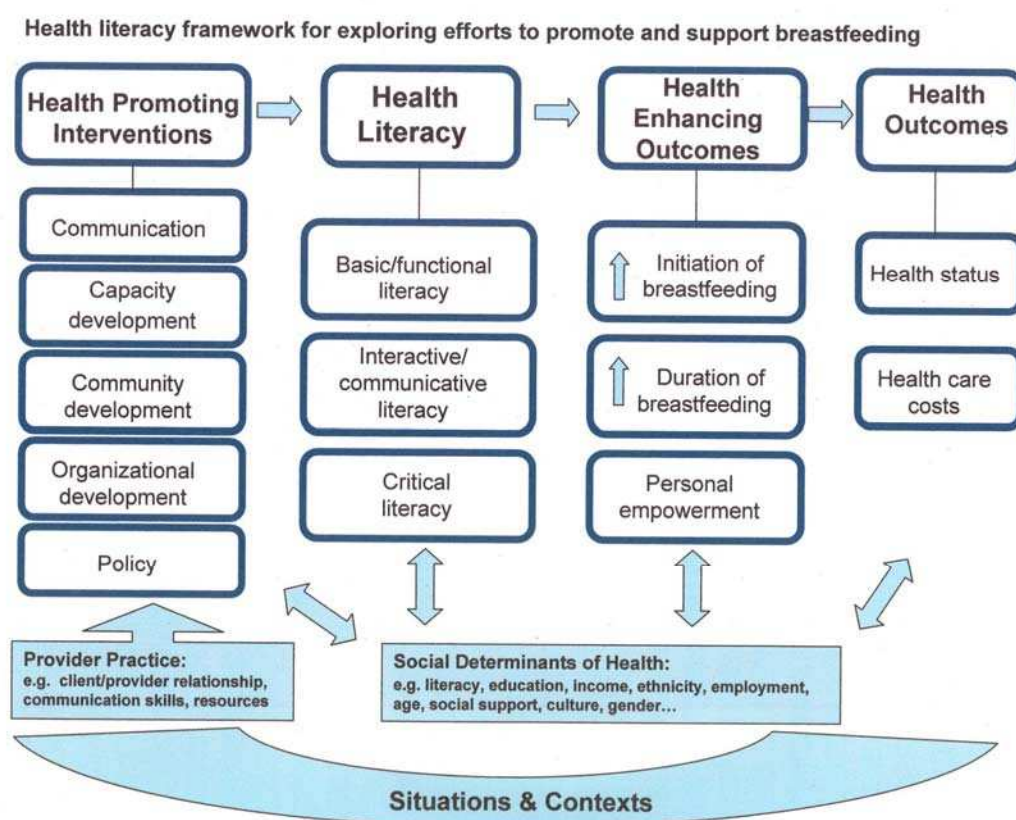
According to Yin, “reliance on theoretical concepts to guide the design and data collection remains one of the most important strategies for completing successful

case studies” (2003, p.3). I found that developing a concept map helped to suggest directions along which to look. I did not use it as a rigid template to impose upon my data. As Maxwell (1996) has suggested, mapping concepts and their relationships can help one lay out the parameters for a case study. He described a concept map as a picture of the territory you want to explore, not the study itself. Miles and Huberman (1994), have also supported the use of conceptual frameworks to help focus the study, underscoring the convention in qualitative research to avoid explicit pre-structured conceptual frameworks in favour of a “a more loosely structured, emergent, inductively “grounded” approach to gathering data” (p.17). They suggested that the categories identified in building a conceptual framework come from the researcher’s experience, theoretical understandings and from the objectives of the study. Such was the case in my development of a conceptual framework for this study.

Early in the development of my proposal for this research, I created a concept map based on my understandings at that time of the concept of health literacy and also the issue of promoting breastfeeding. The concept map depicting a health literacy framework for exploring interventions to promote and support breastfeeding is presented on the following page in Figure 1. As it illustrates, the concept of health literacy is framed as a mediator between health promotion interventions and health outcomes. Centred in the framework are three types of health literacy: basic/functional, interactive/communicative and critical health literacy as proposed by Nutbeam (1999; 2000). General categories of interventions include communication, capacity development, community development, organisational development, and policy. These five categories were adopted from a model for

literacy and health research which emerged from a national research program on literacy and health in Canada led by Rootman (Rootman and Ronson 2005)—one in which I had participated. I considered that these five categories can, in principle, encompass health promotion strategies specific to the promotion and support of breastfeeding and are determined by the practices of providers and factors which influence their practice.

Figure 1. Concept map



In the above concept map, key outcomes of interventions which enhance health literacy— increased initiation and duration of breastfeeding and personal empowerment of the mother—are displayed. More distant health outcomes are improved health status and health care costs. The concept map locates literacy as a social determinant of health—one which has an impact on outcomes directly as well as indirectly through its close interactions with other social, economic and

environmental determinants of health. Notably, this concept map also illustrates the importance of situation and context as represented by the spanning banner at the base of the framework.

A fundamental problem in using the case study method as a research strategy is the identification of the boundaries for the case. A case is viewed as a bounded system and, as noted by Stake, “In the social sciences and human services, the case has working parts; it is purposive; it often has a self. It is an integrated system” (Stake 2000 p. 134). There are geographical, jurisdictional and policy parameters which define the scope of the case that I have chosen to examine. My case study examines the breastfeeding promotion practices within one Canadian district health authority with distinct geographical and jurisdictional boundaries and a clear mandate to serve its rural population. In this particular health district, both literacy and breastfeeding rates are lower than in most other regions of Canada and there are policies aimed at guiding practices to address both health literacy and breastfeeding promotion. The context in which this study is set is further described in section 3.4.

3.4. Setting and context for the case study

This section describes the context in which findings presented in Chapters 4, 5 and 6 are set. First, I outline some geographical and demographic characteristics as well as indicators of population health status. I then focus on evidence which situates health literacy and breastfeeding as relevant public health concerns within this health district. I briefly describe the organization of health services and identify the various practitioners involved in breastfeeding promotion. Lastly, I

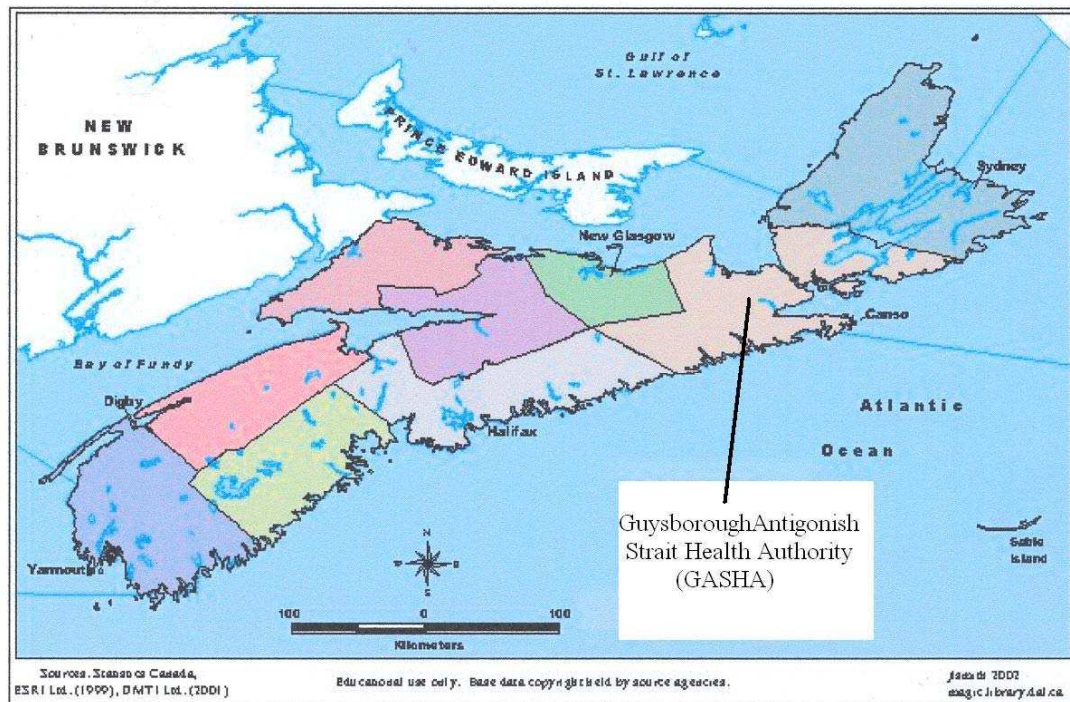
discuss the emergence of policies which address breastfeeding promotion on the one hand and health literacy on the other—both designed to guide health promotion practices within the health district.

3.4.1 Description of the place and the people

This case study is situated in the northeastern part of the province of Nova Scotia. Nova Scotia is one of four provinces on Canada's Atlantic coast. Atlantic Canada is less prosperous than most regions of Canada, with a long history of socio-economic and health disparities (Lilley and Campbell 1999). Northeastern Nova Scotia is like many other parts of Atlantic Canada in that the livelihoods of its people have depended heavily on resource-based industries such as fishing, forestry and mining, with some mixed farming. Over the last two decades, rural coastal communities have been particularly vulnerable to poor economic and social conditions due to a decline in off-shore fishing and processing. There has been a dramatic out-migration of working aged people to central and western Canada where employment opportunities are more plentiful.

The geographical and jurisdictional boundaries for the case study are those of the Guysborough Antigonish Strait Health Authority (GASHA). GASHA covers the northeastern part of mainland Nova Scotia and the neighbouring part of Cape Breton Island as shown in the map of Nova Scotia in Figure 2.

Figure 2. Map of Nova Scotia with District Health Authorities (DHA)



GASHA is one of nine District Health Authorities (DHAs) in the province as of 2001. DHAs are a product of the restructuring of the provincial health system for the purpose of decentralizing health planning and service delivery. Like many other countries, Canada has seen considerable reform to its health system over the last couple of decades (Marchildon 2005). In Canada, health and education have always been provincial responsibilities with health care funds being transferred annually from the federal government to the provincial and territorial governments (Marchildon 2006). In the case of Nova Scotia, funds are transferred from the province to the DHAs for allocation to district-wide health programmes and services.

The total population of GASHA was 47,154 according to latest available census data (2001)¹⁶. This represents slightly more than 5% of Nova Scotia's total

¹⁶ Health Status and Distribution Update, June 2005. www.gasha.nshealth.ca

population of 908,005. GASHA includes the counties of Antigonish and Guysborough on the mainland, and Richmond County and a small part of Inverness County on Cape Breton Island.

- Antigonish County, with a population of 19,580, is the most prosperous with the Town of Antigonish acting as the service centre for the adjacent counties. It is the home of St. Francis Xavier University, a primarily undergraduate university which attracts students and faculty from across Canada and beyond¹⁷.
- Richmond County has a population of 10,225. A small portion of Inverness County adjacent to Richmond County is also included within the boundaries of this health district and together they are referred to as the Strait-Richmond region. Port Hawkesbury is located in this region. It is the second largest town in the district and an industrial centre.
- Guysborough County is the largest and most sparsely populated county in the province with a population of merely 9,825. It is made up of small rural and coastal communities, many of which are a long distance from centres of business and service.

Most people within GASHA are of British origin—Scottish, Irish and English. In particular, there is a strong Scottish culture in the study region, for example through the Gaelic language and music. Acadian French communities are scattered throughout the district, mostly in Richmond and Antigonish counties. In daily life, most people speak English with 94.4 % speaking English only. While 0.5% of the population speaks only French, 4.1 % speaks French and English. A small population of Black African Nova Scotians live in Guysborough County. There are two Mi'kmaq First Nations communities within the district, one in

¹⁷ St Francis Xavier University : www.stfx.ca

Antigonish County and the other in Richmond County. Mi'kmaq is spoken along with English in these communities.

For decades, the people of northeastern Nova Scotia have been dealing with poor social and economic conditions which have threatened their health and social wellbeing. In fact, this region is well known for its strong tradition of social action in the pursuit of social justice. A community development movement, known as the 'Antigonish Movement', came about in response to the poverty afflicting farmers, fishers, miners and others in Atlantic Canada in the 1920s and 1930s. It was inspired by Father Moses Coady and others who had a strong belief in social reform through adult learning and continues to this day through the Extension Department and Coady International Institute at St. Francis Xavier University located in Antigonish. Many community-based organizations in the region are committed to this ethos and to addressing current health and socio-economic issues.

3.4.1.1 Population health status and determinants

Morbidity and morbidity rates are higher in GASHA than in the wider province and country¹⁸. There is compelling evidence of health disparities in comparison to other parts of the province, for instance:

- Total age standardized mortality data reveal a rate of 938.7 per 100,000 in GASHA compared to a provincial rate of 895.2 per 100,000.
- Potential life years lost per 100,000 people aged 0-74 years for selected causes of death are higher within GASHA than for the Nova Scotia population as a whole.

¹⁸ Unless otherwise noted, information profiling the population within GASHA is taken from the June 2005 Health Status and Distribution Update for GASHA

- Residents of GASHA have the second highest diabetes rates in the province.
- According to self-reported health data, only 16.3 % of GASHA residents rate their health as excellent compared to 18.4 % in the province. Moreover, 15.6% self-rate their health as fair to poor compared to 13.8% provincially.

Moreover, the population of GASHA does not fare well in terms of key determinants of health.

- Mean total personal income from all sources for residents in the district is on average \$23, 765 compared to a provincial average of \$27, 711.
- The unemployment rate is consistently higher than in other parts of the province. An unemployment rate of 12.5 % in GASHA compares to a provincial average of 9% and Canadian average of 7%.
- Education levels are lower than provincial averages with 44% of residents between 45 and 64 years of age having less than high school diploma (equivalent to 13 years of school achievement including a primary year) compared to 33.7% of all Nova Scotians.
- Fewer GASHA residents aged 45-64 have either a high school diploma, college diploma or university degree than in the rest of the province.

On a positive note, self-perceived levels of social support are higher among GASHA residents at 88.4% compared to 85.1% of Nova Scotians.

There are also notable socio-economic disparities within the district as shown in Table 1¹⁹. Household income and education levels within GASHA tend to be higher in Antigonish County and lowest in Guysborough County. Moreover, Guysborough County, the district and province's largest and most sparsely

¹⁹Source of data : www.targetnovascotia.com

populated county, also has the highest mean age which is largely attributed to out-migration of working age adults to other parts of the province and country over the years.

Table 1. Selected demographic characteristics according to counties in GASHA

Demographic factor by county	Antigonish	Richmond	Guysborough
Household income ²⁰	\$43, 062	\$31,340	\$30, 437
Mean age	37 years	42 years	43 years
Not completed high school	20%	22%	42%
Hold bachelor's degree	28%	10%	7%

3.4.1.2 Levels of health literacy

Recently data on the health literacy levels of the population has become available for Canadian provinces and health districts based on international survey data as described in Chapter 2. Unlike for the other three Atlantic provinces, the mean health literacy score is higher for Nova Scotia (258.7) than for Canada (255.7) (CCL 2007a; CCL 2008). However, this does not reveal the full picture with respect to health literacy levels in rural Nova Scotia. While there is no significant difference between urban and rural areas at the national level, health literacy differences are observed within several provinces, including Nova Scotia. In Nova Scotia, the mean health literacy score is lower in rural communities (254.7) compared to urban areas (261.8)²¹. Whereas the proportion of adult Nova Scotians

²⁰ Average household income in 2005 for Canada is \$69,548 and for Nova Scotia is \$57,366. (Statistic Canada 2008)

²¹ Source: IALLS 2003 survey data accessed through personal communication by email with M. Lachance, Canadian Council on Learning, July 4, 2008

living in urban areas at level 2²² or below is 55%, the proportion of the Nova Scotians adult population at level 2 or lower living in rural areas is 60%, the same as for the Canadian population. The greater likelihood of observing low levels of health literacy in rural areas of Nova Scotia is evident in the distribution of health literacy scores within GASHA compared to the province and Canada. Table 2 shows the prevalence of low health literacy scores within the population in GASHA compared to those reported for the province of Nova Scotia and Canada.

Table 2. Distribution of low health literacy of GASHA compared to Nova Scotia and Canada²³

Health literacy level by jurisdiction	GASHA (DHA #7)	Nova Scotia	Canada
Proportion at level 2 and below	68 %	57 %	59.5 %
Proportion at level 1 and below	38 %	25.3 %	25.9 %
Number at level 2 and below	26,500	426,003	14,814,623
Number at level 1 and below	12,500	188,998	6,450,844
Mean health literacy score	240	258.7	255.7

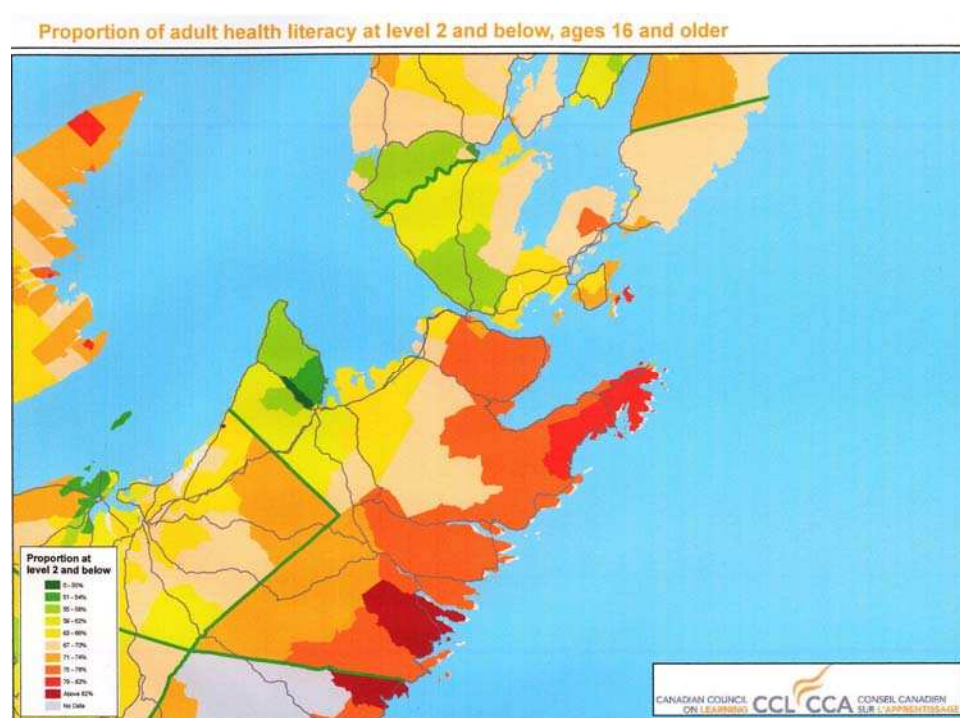
A compelling image of the inequalities in health literacy which appear to exist throughout GASHA is presented in Figure 3 using the Geographical Information Systems (GIS) mapping of health literacy recently made available from the CCL

²² Level 1 (0-225) reflects very low literacy skills; level 2 (226-275) reflects a capacity to deal only with simple, clear material involving uncomplicated tasks; level 3 (276-325) reflects adequate skills to cope with the demands of everyday life and work in an advanced society; level 4 (326-375) and level 5 (376-500) reflect strong skills

²³ Source: Data from the 2003 IALLS survey and the 2001 Canadian Census

(2007a)²⁴. The proportion of adults 16 years and older with health literacy scores at level 2 and below is displayed through a continuum of coloured shading of areas on the map. As illustrated in the side-bar next to the map, green shading refers to 0-50% of the population with low health literacy while red areas depicts communities with above 82% of the population with low health literacy. The map shows that there is less prevalence of low health literacy, as represented by the green shaded area, in and around the town of Antigonish. There is a pronounced difference in the distribution of low health literacy in other communities throughout GASHA in comparison to Antigonish which is the medical, educational and professional service centre for the district.

Figure 3. GIS map showing distribution of health literacy in GASHA²⁵



²⁴ Source: Canadian Council on Learning. The analysis and mapping of the health-literacy results were conducted by J. Douglas Willms, Canada Research Chair in Human Development at the University of New Brunswick (UNB), with the assistance of Teresa Tang, GIS Programmer at the Canadian Research Institute for Social Policy at UNB. The data for the local area maps is from the 2003 International Adult Literacy and Life Skills Survey (IALSS) conducted by Statistics Canada and the Organisation for Economic Co-operation and Development, and the 2001 Canadian Census.

²⁵ Source of slide: M. Lachance, Canadian Council on Learning, Ottawa, ON

The observed prevalence of low health literacy in GASHA adds support to findings from a community-based qualitative research study conducted between 2001 and 2004 suggesting that low health literacy was a rural population health issue of significant concern in this health district (Gillis 2007). In 2000, Community Health Board members in Antigonish became concerned about the potential impact of literacy on the health of their population. Their concern prompted a university-community collaborative research project called the *Health Literacy in Rural Nova Scotia Research Project*²⁶ (Gillis and Quigley 2004; Gillis, Quigley and MacIsaac 2005). That study, funded by a national research council²⁷, explored the links between literacy and health by interviewing adults with low literacy skills, key informants knowledgeable about health and social issues in their communities, and health and literacy practitioners. Findings pointed to a number of areas where improvements in policy and practice were needed. Roundtable consultations with a wide array of stakeholders resulted in a number of priorities for action, including increasing awareness among health practitioners of literacy as a health-related concern. It is noteworthy that the research team and advisory committee, composed of practitioners and managers from the fields of health and literacy, did not adopt a definition for health literacy from the literature, but rather developed their own description of health literacy based on their insights as the research project unfolded. This description of health literacy is presented in Table 3.

²⁶ Information on the Health Literacy in Rural Nova Scotia Research Project can be accessed at <http://www.nald.ca/healthliteracystfx>

²⁷ The Social Sciences and Humanities Research Council of Canada (SSHCC)

Table 3. Description of health literacy

<p style="text-align: center;">What is health literacy?</p> <p>Health literacy is a new way of thinking about health and literacy. It provides an opportunity to develop policy, practices and programs that address the health concerns of everyone, especially those with limited literacy skills.</p> <p>By working together to address health literacy, we can enable all people to:</p> <ul style="list-style-type: none">• Find, understand, and use the information they need to stay healthy• Get the services and supports that they need• Make choices in their own lives that help keep them healthy• Speak up about their own health needs• Have more control over the things that make and keep them healthy. <p>Source: http://www.nald.ca/healthliteracystfx/start.htm</p>
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In responding to the findings, GASHA became the first district health authority in Nova Scotia to make a concerted effort to address health literacy. Funding was received from the provincial health department to implement and evaluate a project to increase health providers' awareness of literacy as a determinant of health using findings from the local research as a base (Carpenter, Sears and Gillis 2005). A district-wide health literacy network was formed "to ensure that all organizations, communities and systems take responsibility for communicating clearly and supporting health promoting actions"²⁸. A health literacy policy was developed and adopted by GASHA, the first of its kind by a health authority in Canada. This policy is described later in this chapter (see section 3. 4.3.2.2, p.124).

²⁸ Information on the network can be accessed at <http://www.nald.ca/healthliteracystfx/resource/guysborough.pdf>

Findings from this research also stimulated a province-wide health literacy awareness initiative led by the Nova Scotia Department of Health in partnership with the Department of Education in April 2005. This initiative included production of a health literacy DVD targeted to health practitioners. It featured findings from the study and interviews with adult learners and health practitioners. This DVD was widely distributed to practitioners throughout Nova Scotia and made available through the provincial health department's website²⁹. It was also the focus of a media launch in April 2005 and a provincial workshop for health and literacy practitioners in May 2006. There have been continued efforts by the Nova Scotia Department of Health to integrate health literacy into their primary health care planning. The health literacy work undertaken in Nova Scotia has been recognized nationally (Rootman, Frankish and Kaszap 2007).

3.4.1.3 Rates of breastfeeding initiation and duration

Despite an increase in breastfeeding over the last few decades in Canada, rates in the Atlantic region, including the province of Nova Scotia, continue to lag behind other provinces. According to the most recent Canadian Community Health survey reports, 76.4% of Nova Scotia mothers initiated breastfeeding compared to the national rate of 84.5% (Statistics Canada 2005). Breastfeeding initiation rates in Nova Scotia have been gradually increasing over the last few decades.

According to the 1994 Infant Feeding Survey, 62.5% of babies were breastfed at birth compared to 51.5 % as reported in the 1982 Infant Feeding Survey (Nova Scotia Department of Health, Public Health and Health Promotion 1998). Even though there has been an upward trend towards initiating breastfeeding, rates of

²⁹ Information on the Nova Scotia health literacy initiative can be accessed at <http://www.gov.ns.ca/health/primaryhealthcare/healthlit.htm>

breastfeeding duration are still comparatively low. Only 12.4 % of Nova Scotia mothers were exclusively breastfeeding at 6 months compared to 18.7 % of Canadian mothers (Statistics Canada 2005).

According to breastfeeding data collected by the Reproductive Care Program of Nova Scotia³⁰ for the years 2004 and 2005, 61.32 % of babies in GASHA were breastfeeding at discharge compared to the provincial average of 69.20 %. No data were available on breastfeeding duration rates. Likewise, there were no data comparing mothers' level of literacy or health literacy with breastfeeding prevalence. According to the last province-wide survey (Nova Scotia Department of Health 1998), 39.5% of Nova Scotia mothers who attended Grade 9 to 13 and did not graduate from high school breastfed their babies, compared to 83.5% of mothers who were university graduates.

Findings from a telephone survey³¹ of 758 women in northeastern Nova Scotia and Cape Breton Island who delivered 882 babies within a three year period beginning in 1995 showed that slightly more than half of these infants were initially breastfed. Mothers with lower levels of education, lower incomes and under 25 years of age were less likely to breastfeed. A woman with post secondary education was twice as likely to have breastfed her baby as was a woman with a lower level of education. Attendance at prenatal education sessions was positively correlated with breastfeeding (Paredes, Woodford 1999).

³⁰ Source: Nova Scotia Atlee Perinatal Database through personal communication with M. Amero November 21, 2006.

³¹ GASHA participated in the Local Public Health Infrastructure Development (LoPHID) Study—a component of Health Canada's National Health Surveillance Infrastructure Initiative

In 1997, Hogan (2001) conducted a study to assess perceived barriers to breastfeeding and needs for programmes to promote breastfeeding in GASHA. Subjects from randomly selected households were contacted by telephone and invited to complete a self-administered questionnaire. Eighty percent of the 70 respondents were mothers and of 46% of them had breastfed. Education levels of respondents were not reported. Most frequently mentioned sources of support were partner, family physician, female friend, hospital nurse and mother in that order. The four most frequently reported barriers to breastfeeding were less freedom, lack of knowledge and “not comfortable”, and “too embarrassing”. Participants suggested that more support for breastfeeding needed to come from family members, employers, and hospital and community-based health professionals. They also suggested that small support groups with women who had breastfed were needed.

Next, I give a brief description of the how the district health system is organized, in particular the services to promote breastfeeding and policies relevant to this case study.

3.4.2 Health services and policies

The mandate of GASHA is to govern, manage, plan, monitor, evaluate and deliver health services and programmes according to the health care needs of the district³². Guided by a volunteer Board of Directors, GASHA is responsible for delivering health services and programmes to its population within a catchment area of some 8,000 square kilometres—an area which represents 15.3 % of the

³² Source: http://www.gasha.nshealth.ca/All_About_Us/default.htm

area of the province. Within GASHA there are three volunteer Community Health Boards (CHBs). Each CHB is responsible for assessing their local health needs, developing health plans which are submitted to the District Health Board and identifying ways to improve the overall health of their community³³.

There are five hospitals within GASHA. These include one regional hospital (St. Martha's Regional Hospital in Antigonish) and four small rural community hospitals. Women travel from communities throughout the district to deliver their babies at the regional hospital in Antigonish³⁴. Public Health Services (PHS), a shared service with the neighbouring Cape Breton District Health Authority, provides maternal and child health services, such as home visits to mothers and newborns, and prenatal education classes. During the time of the study, planning was underway for the implementation of an extended programme for PHS consisting of universal screening and further in-depth family assessment to identify families requiring enhanced supports, including home visiting support for up to three years³⁵.

There are significant challenges in planning and delivering health services throughout this large and sparsely populated district. Severe winter weather and lack of public transportation are major barriers to accessing health and other services, most of which are centralized in Antigonish. Health budgets are

³³ Source of information on GASHA

Community Health Boards: <http://www.gasha.nshealth.ca/CHB/default.htm>

³⁴ Provincial legislation has only recently allowed for licensed mid-wifery and the first mid-wives will be in place in 2008.

³⁵ Healthy Beginnings Enhanced Home visiting program is an enhancement to current PHS perinatal programs and services and is part of an integrated continuum of services offered with provincial, district and community partners, from pre-conception to the pre-school years.

pressured by increasing demands of an aging population and high rates of chronic disease. Recruitment and retention of health professionals is a major issue in this district as it is in many rural areas throughout Canada. In particular, there are acute shortages of nurse and physician services (Lombard 2005). There are fewer family physicians per 100,000 population within GASHA (81) than in Nova Scotia (102) as a whole.

Next, I describe how efforts to promote and support breastfeeding are organized in order to increase the comparatively low rates of initiation and duration of breastfeeding in this health district.

3.4.2.1 Organization of breastfeeding promotion practice

Breastfeeding promotion practices in GASHA are undertaken within a highly organized system intended to deliver information and services by various professional and lay providers. It seeks to provide information and services across a perinatal continuum of care extending throughout the prenatal period to care of the infant. Breastfeeding information is provided along with information on many topics related to maternal and infant health.

Family physicians are considered the first point of contact that women have with the GASHA perinatal system of care as women tend to consult their physicians for pregnancy confirmation. Most babies are delivered by obstetricians at the regional hospital³⁶. Family physicians are expected to refer all pregnant patients to an obstetrician once pregnancy is confirmed. They are also to refer patients to the regional hospital's perinatal clinic for perinatal education and pre-admission

³⁶ One family physician continues to deliver babies. There are no midwives.

assessment. Prenatal education and follow-up of mothers and newborns is also provided by public health nurses who make home visits and hold prenatal education classes with expectant parents.

Other key sources of breastfeeding information and support include La Leche League (LLL) and the Canada Prenatal Nutrition Program (CPNP). Community-based interventions such as those of LLL and the CPNP, and sometimes public health prenatal classes, are provided at family resource centres. Family resource centres are funded federally through the Community Action Program for Children (CAPC)—a programme somewhat akin to Sure Start in the UK. Long term funding is provided to community coalitions to deliver programmes that address the health and development needs of children from zero to six years who are considered to be living in conditions of risk. CAPC considers that communities have the ability to identify and respond to the needs of children and emphasizes partnerships and community capacity building to address these needs. There is one family resource centre in each of Antigonish and Guysborough counties, and satellite activities are offered in the Strait Richmond area.

Table 4, as shown on pages 119 and 120, provides a summary of the range of settings and practitioners through which breastfeeding information is provided.

Table 4. Practice settings and practitioners involved in breastfeeding promotion interventions within GASHA

Practice setting	Target clientele	Practitioners	Referral protocol	Comments on contextual features
Perinatal clinic in regional hospital	Pregnant women; new mothers and newborns within GASHA	Nurse trained as lactation consultant acts as clinic coordinator Dietitian may be asked to consult with patients about infant feeding issues	Intended to be key entry point to perinatal care continuum; pregnant women referred by family physicians and by obstetricians	Created in 1995 to provide prenatal and postnatal care and education to women within the regional hospital catchments All pregnant women to be assessed prior to admission for delivery. Concern was raised by practitioners that referrals by physicians to the perinatal clinic were not early enough in pregnancy During the time of the study, four maternity nurses were being trained as lactation consultants based in the clinic Referrals to the dietitian have decreased due to increasing demands for diabetic counselling
Children & Women's Health Unit at regional hospital	Obstetrical patients	Maternity nurses	Pre-admission completed at perinatal clinic	Mothers and newborns are typically discharged within 48 hours after birth—a measure resulting from district budgetary constraints
Offices for obstetrical and paediatric specialists in regional hospital	Women delivering babies within GASHA	Obstetricians; paediatricians	Referred by physician	One family physician in the district delivers babies. No midwife services exist in the district. Before 2006, there was no provincial legislation for licensed midwifery

Table 4 *continued from previous page*

Practice setting	Target clientele	Practitioners	Referral protocol	Comments on contextual features
Physician offices in throughout the district	General population	General practitioners (family physicians)	Physicians expected to refer pregnant patients and mothers to perinatal clinic, obstetrician and other perinatal services	Most medical practices on based on fee for service; the exception is one collaborative practice including a nurse practitioner working with physicians Recruitment and retention of physicians for rural areas is longstanding problem in the district
PHS offices, clients' home, and community venues	Population within GASHA Pregnant women, mothers and infants are a priority	Public health nurses Public health nutritionists advise staff and provide limited direct service	Referred to PHS by physicians, perinatal clinic and self referral	Shared service with adjacent DHA. Provincial guidelines for public health practice set by the NS Department of Health Promotion and Protection. Home visits by nurses to pregnant and new mothers; group prenatal classes
CPNP in family resource centres and clients' homes	Vulnerable pregnant women and mothers of babies up to six months	Coordinators with various backgrounds such as nursing and nutrition. Informal peer leaders	Referred to CPNP by perinatal clinic, public health nurse; physicians and self referral	Long-term federal funding to reach 'vulnerable pregnant women' with specific objectives to reduce the incidence of unhealthy birth weights, improve the health of both infant and mother and encourage breastfeeding. ³⁷ Services may include food supplementation, nutrition counselling, support, education, referral and healthy lifestyle counselling
LLL meetings held at one family resource centre	Mothers who breastfeed	Lay leaders with breastfeeding experience	Self-referral	One LLL group in district active since 1980. Monthly meetings held and individual support provided by lay leaders.

³⁷ CPNP is funded through the Public Health Agency of Canada: http://www.phac-aspc.gc.ca/dca-dea/programs-mes/cnpn_main_e.html

3.4.2.1.1 The Breastfeeding Committee

Professional and lay practitioners, as well as advocates of breastfeeding, have been working together to promote breastfeeding in this district for many years. Over these years, there have been various organizational structures. The Breastfeeding Committee was formed in 2003 as a sub-committee of a maternal and child health committee based out of the regional hospital. The Committee was made up of 10 to 15 members from a wide range of breastfeeding practice areas, such as perinatal clinic and maternity care nursing, paediatricians, public health nursing, CPNP, LLL, university, CHB, family medical practice, as well as breastfeeding mothers. Since its formation, the Committee has been involved in breastfeeding promotional activities such as the production and distribution of a poster and pamphlet on breastfeeding. The Committee is represented on the Provincial Breastfeeding and Baby Friendly Initiative (BFI) Committee which was formed in 1999 to build commitment throughout the province for breastfeeding and to work towards establishing breastfeeding as the cultural norm for infant feeding in Nova Scotia (Amero and Inkpen 2008).

As a member of the GASHA Breastfeeding Committee, I observed and participated in meetings. Discussions and activities tended to centre on defining the Committee's role and ultimately led to its transition into a district-wide Baby Friendly Initiative (BFI) Committee. Terms of reference for the new Committee were not formally agreed upon until after my fieldwork was completed. In February 2007, the committee agreed that "The GASHA Baby Friendly Initiative Committee will build commitment throughout GASHA for breastfeeding and implement the BFI Code so that breastfeeding will be the cultural norm for infant feeding". The composition of new GASHA Baby Friendly Initiative Committee

was essentially unchanged in membership. It still included hospital and community-based professional and lay practitioners involved throughout the district in the promotion and support of breastfeeding.

Next, I describe two policies in GASHA which are intended to provide guidance to practitioners with respect to their promotion of breastfeeding and to health literacy. These two separate policies have evolved through different processes. The policy context for this case study is at the point of their convergence.

3.4.2.2 Two policies central to the case study

Policy directing the delivery of health services in Nova Scotia is developed at both provincial and district health authority levels. Policy development and adoption at the provincial level often influences policy and practice efforts at the district level and sometimes, district efforts become models for province-wide initiatives. I describe the emergence of two policies in GASHA of relevance to this case study: first, the promotion of breastfeeding and, second, health literacy.

3.4.2.2.1 Breastfeeding policy

Practices related to the promotion of breastfeeding are largely influenced by provincial breastfeeding policy and through the collaboration of practitioners across various medical and community-based practice settings in GASHA. At the time of the study, a position statement on infant feeding supported by Public Health Services, the DHAs and the Nova Scotia Department of Health stated that “promoting, protecting and supporting breastfeeding as the optimal method of infant feeding involves many partners, including those from varying levels of

government (federal, provincial, municipal), the community, community organizations and agencies, health professionals” (Public Health Services, no date). Over the last decade, attention at both provincial and district levels has been directed to developing policy and organizational means to increase breastfeeding rates.

In March 2005, a provincial nutrition strategy was released which included the promotion of breastfeeding as one of four priorities (Nova Scotia Alliance for Healthy Eating and Physical Activity Healthy Eating Action Group 2005). Later that year, Nova Scotia became one of only two provinces/territories in Canada to adopt a breastfeeding policy which specifically addressed breastfeeding duration. The provincial breastfeeding and BFI policy supporting the goal of exclusive breastfeeding for duration of 6 months re-confirmed the government’s commitment to breastfeeding and the work of the Provincial Breastfeeding and Baby Friendly Initiative (BFI) Committee. The 2005 policy stated that,

The Departments of Health and Nova Scotia Health Promotion and Protection hold a firm and unequivocal position in favor of breastfeeding and communicate its position both within government, the health system, to health system providers as well as the general population. (Policy Statement on Breastfeeding in Nova Scotia Point 5.5.VI, Approved September 2005, Updated 2006, p. 1; see Appendix A).

In making this announcement, the Health Minister was quoted as saying: “Supporting the women in your life with this important decision will increase rates of healthy children and mothers in Nova Scotia. Ultimately that will help sustain the health-care system” (MacLeod 2005, p.1). This comment reflects the priority the government placed on breastfeeding as a strategy for promoting a healthy population as well as reducing health care costs.

This policy also “provides a fundamental point of reference for all provincial government and health system funded practitioners and staff” (Policy Statement on Breastfeeding in Nova Scotia Point 5.5.VI, Approved September 2005, Updated 2006, p. 1). Health professionals in GASHA are thus required by policy to promote and support breastfeeding as the normal way to feed infants. The policy calls for the integration of updated and standardized breastfeeding and infant feeding information into all district child health programmes and documents directed to parents and practitioners (Department of Health and the Nova Scotia Department of Health Promotion and Protection October 2005). The promotion and support of breastfeeding is therefore a priority within GASHA (Guysborough Antigonish Strait Health Authority April 2006). Through the Breastfeeding Committee, GASHA has been working to develop a collaborative strategy to promote and support breastfeeding in line with the provincial policy. It was not until May 2008, after the fieldwork for this study was completed, that GASHA officially adopted the GASHA Breastfeeding Policy (see Appendix B)—a policy that is in keeping with the provincial Breastfeeding Policy adopted in 2005.

3.4.2.2.2 Health literacy policy

In 2004, a health literacy policy was developed and adopted by GASHA as a follow-up to findings from the study mentioned above in section 3.4.1.2. The policy as officially listed in the GASHA Policy and Procedures Manual can be found in Appendix C. The objective of the policy is

to ensure the Guysborough Antigonish Strait Health Authority (GASHA) is an organization that meets the literacy needs of our population with regards to communicating health information, navigation of programmes and facilities, access to programmes and services and other day-to-day interactions. GASHA will also advocate addressing health literacy as a determinant of health.

The policy also calls for the completion of a health literacy audit annually by staff and managers in all service units within GASHA. The health literacy audit was developed to engage staff and managers in assessing the extent to which their services and workplaces are in keeping with the policy objective. Attached to the policy are two health literacy environmental assessment tools, one for managers and one for staff. The policy and the assessment tools were posted on the GASHA website³⁸. Each tool lists a number of indicators which reflect various aspects of health literacy practice and settings in which individuals access information and services. I refer to indicators that are particularly relevant to the findings from this study as I discuss implications of my findings for practice in Chapter 7 (see section 7.2, p.322).

In this section, I have described the setting and context for the case study. Now that the boundaries for the case study have been established, I turn to outlining the methods I used to collect data during my fieldwork.

3.5 Methods used for data collection

Yin (2003) stressed the importance of using multiple sources of evidence in applying the case study method. In undertaking this case study, I drew upon the following methods to collect data: one-to-one interviews with practitioners, observation of practice in selected practice settings and, at a later stage in the study, focus group interviews with mothers and practitioners who had participated in the interviews. Participants to interview and practice sites for observation were purposively selected to enable me to hear and see how practitioners involved in

³⁸Health literacy policy can be found on the GASHA website at http://www.gasha.nshealth.ca/literacy/HL_Policy_May2006.pdf

breastfeeding promotion engage with dimensions of health literacy. Criteria for the purposeful selection of participants and sites are outlined in this section as I describe the various methods of data collection chosen. I also relied on policy and other relevant documents to elucidate the geographical, demographical, organisational and policy context in which practitioners engaged in their promotion of breastfeeding as I described in the previous section. Data collection began on October 4, 2005 with my first practitioner interview. I concurrently conducted interviews and observed in selected practice sites from December 2005 to the end of March 2006. I completed my last interview on June 5, 2006. To seek feedback on preliminary findings from the interview and observational data, focus group interviews were conducted with mothers in October 2006 and with practitioners in November 2006.

Prior to the collection of data, the study was reviewed and approved by the GASHA Research Ethics Committee and the St Francis Xavier University Research Ethics Committee. Annual reports on the status of the research have been submitted to these research review bodies as requested. Both of these research ethics review committees adhere to the Tri-Council policy entitled Ethical Conduct for Research Involving Humans. The Tri-Council is composed of the Medical Research Council of Canada, the Natural Sciences and Engineering Research Council of Canada, and the Social Sciences and Humanities Research Council of Canada.

Informed consent was obtained from all participants prior to individual and group interviews and observations. Protocols were followed for informing all

participants of the purpose of the study, what would be expected of them, and any risk to their anonymity. Data including audio tapes, consent forms, and information which may identify individual participants were secured in a locked cabinet. Electronic files such as transcripts were password protected and only accessible to me. Summaries of interview and observation data shared with supervisors did not disclose the identity of participants. Care has been exercised in protecting the anonymity of participants in the presentation of findings.

Next, I describe the various data collection methods, i.e. personal interviews with practitioners, observations in selected settings, and focus group interviews.

3.5.1 Personal Interviews with practitioners

Interviewing, a commonly used method in qualitative research, tends to refer to in-depth, semi or loosely structured forms of interviewing (Mason 2002).

Although widely used, interview data are considered useful if treated as a contextual account and not a reproduction of reality (Green and Thorogood 2004).

Different people represent reality in different ways. In this study, I chose to conduct face to face personal interviews with informants to hear accounts of practices within a health district where both breastfeeding promotion and health literacy were considered priorities. These interviews were carried out with professional and lay practitioners to determine the extent to which their descriptions of breastfeeding promotion practices incorporated dimensions of health literacy. In addition, I was interested in identifying any conflicts or tensions arising in operationalising health literacy within the case of breastfeeding promotion.

Interviewing offered a number of advantages as a data collection method for this study. I selected this method because I considered that it would enable practitioners to express their perspectives and opinions on their breastfeeding promotion practice and how they incorporated notions of health literacy. I wanted to be able to question participants about their experiences, to explore various dilemmas that might be raised as they talked, and to gain insight into challenges encountered in the various contexts of their practice. Interviewing practitioners also enabled me to ask them about historical information to add depth to my understanding of their practice. I learned, for example, how organisational supports for breastfeeding in the district had developed over the years, such as formation of the breastfeeding committee and creation of the perinatal clinic.

As noted earlier, it was not feasible to observe practices of all of the professional and lay practitioners who promoted breastfeeding across the spectrum of perinatal care services in this district. Interviewing participants in their place of practice gave me a sense of the physical setting in which they interacted with clients. Given the diverse cultural, social and economic nature of this large rural district, collecting data by personally interviewing practitioners — in contrast to telephone interviewing or corresponding by email—contributed to my appreciation of the context in which practitioners engaged in the promotion of breastfeeding in their various communities.

3.5.1.1 Selection of sample for interviews

The interview sample was purposefully selected in an effort to capture multiple perspectives from the range of practitioners involved in breastfeeding promotion throughout this health district. Criteria were established to guide within-case sampling of professional and lay informants for interviewing. In developing a preliminary sampling strategy, I was attentive to three major dimensions referred to by Murphy et al. (1998). These dimensions were context, people and time.

- *Context:* Four categories for sample selection relating to context were derived from categories of practitioners identified in a systematic review of prenatal and postnatal breastfeeding promotion interventions by Couto de Oliveira, Camacho and Tedstone (2001). In their review, they found that breastfeeding promotion interventions occurred in the following settings: women's homes (34%), primary health care units (29%), hospital clinics (29%) and the community (8%). These categories of settings were relevant within the health district serving as the case study site. Another aspect of context which I considered in sample selection was location. I aimed for inclusion of practitioners from throughout the district in order to access those who were knowledgeable of breastfeeding promotion efforts within different cultural and geographical settings. My aim was to access informants involved in breastfeeding promotion practice from throughout the health district.
- *People:* Based on their review, Couto de Oliveira and colleagues (2001) also identified two categories of practitioners involved in breastfeeding promotion: professional and peer/lay. They reported that health professionals, such as midwives, nurses, paediatricians, obstetricians, nutritionists and auxiliaries, carried out most interventions (70%) while peer counsellors carried out only 14% of interventions, and a combination of professional and peer workers were involved in 13% of them. All examples of identified practitioners, except midwives and auxiliaries, were known to practise within the district health in which this study took place. I found these criteria useful as a general guide to

identifying the range of practitioners likely to be involved in breastfeeding promotion efforts.

- *Time:* Interviews were conducted in the period from October 4, 2005 to June 5, 2006. This was a suitable timeframe as it increased the likelihood of accessing a full range of interventions during a time of normal service delivery, excluding the summer vacation period.

I made decisions about sampling as I gathered my data and became engaged in its analysis. The within-case sampling strategy evolved to ensure that the full range of relevant informants was represented in the data and that the data collection was appropriate to the pursuit of my research objectives. During interviews, some practitioners made suggestions of potential informants to contact. By attending meetings of the Breastfeeding Committee (see section 3.4.2.1.1, p.121), I became aware of other practitioners in the district who were involved in breastfeeding promotion efforts and likely to provide diverse perspectives, for example, practitioners at a rural health centre and a First Nations health centre. Ultimately, interviews were conducted with 30 professional and lay informants from different hospital and community settings where breastfeeding promotion interventions are undertaken.

Thus, determining the adequacy of my sample required me to not only refer to the criteria of context, people and time in an effort to capture a spectrum of different perspectives of practitioners involved in breastfeeding promotion throughout district, but also to be informed by the data as collected. As I proceeded with the interviewing and as I read through my interview transcripts, I was cognizant of the extent to which ideas being discussed were essentially ones already heard.

Applying the concept of theoretical saturation meant determining when the data

generated was viewed largely as repetitive and no new thematic threads were appearing. Proponents of grounded theory refer to theoretical saturation as a guide to identifying an appropriate sample in terms of not only size but also adequacy. According to Bowen (2008), “an ‘appropriate’ sample is composed of participants who best represent or have knowledge of the research topic” (p.140). Because data collection and analysis are concurrent processes, the researcher can increase the size of the sample until there is redundancy in the information provided by informants. The data set is considered complete when no new insights are obtained.

3.5.1.2 Gaining access to practitioners

Negotiating access to a range of practitioners was critical to the success of my data collection. The first step in gaining access was to identify the gatekeepers who were in positions to either enable or block my access. I began by meeting with senior administrators with the health district to explain the study and garner their support. They fully endorsed my proposed study, provided me with relevant background information, and suggested strategies for engaging practitioners’ participation in interviews and identified opportunities for observation in selected settings. PHS managers suggested names of public health nurses who were actively involved in breastfeeding promotion through their maternal and child health programmes. Using the information letter about the study I provided to them, they emailed public health nurses and nutritionists in offices throughout the district. Using their list, I selected informants with specific consideration to their geographical location.

I also contacted the managers of hospital maternity services and of primary health care services, and the director of family resource centres. They too suggested names of informants to approach and informed their staff of my study. My experience was consistent with the claim by Murphy, Spiegel and Kinmonth (1992) that negotiating the support of key stakeholders and organisations at the beginning of the study can ease access to practitioners and practice settings. Physicians were most difficult to reach. I was given a list of all physicians in the district by a PHS manager. However, few had email addresses and they were difficult to reach through their office staff. Physicians practise independently in GASHA and there was no central gatekeeper with whom to negotiate access. However, by attending a special medical staff meeting on a maternal and child health issue I was able to approach physicians individually, tell them about the research, and invite their participation. I followed up on these contacts and with some persistence was able to schedule interviews. Despite this effort, rural physicians were most difficult to access. There is a lack of physicians in rural areas. In fact, in some cases, physicians from outside the health district provide rotating service by travelling into a rural community one week per month. Rural physicians did not attend the above mentioned meeting. After repeated telephone calls to their offices, I was only able to secure one interview with a rural physician. Hospital maternity nurses were also particularly difficult to access because of their shift work. Contacting them required repeated calls to the obstetrical ward and persistent follow-up.

After I made an initial contact with potential participants, I sent a letter of information outlining the purpose of the study (see Appendix D). I followed up by

telephone or email to discuss and arrange an interview. No incentives were offered to informants for their participation. Most interviews were conducted in the informant's place of practice; a small number were conducted in my office.

3.5.1.3 Description of interview sample

Informants were selected according to the criteria described earlier in this chapter in section 3.5.1.1 (p.129). Table 5 shows the geographical distribution across the three counties, including a First Nations community, of the 30 practitioners who participated in personal interviews.

Table 5. Geographical distribution of informants

Antigonish	Richmond Strait	Guysborough	First Nations Community	Total number of informants
19	6	4	1	30

Table 6 on page 134 provides a summary description of the informants. Each of the 30 practitioners interviewed is identified by a number preceded by the letter 'P'. This code is used in attributing quotes taken from the interview transcripts to the respective informant in presenting findings in the next three chapters. The term "practitioner" is used consistently throughout the presentation of findings to refer to the interview informants. Informants are also identified in the text by their provider group and, if pertinent to the discussion, their location. Because of the small numbers of practitioners within each provider group and the familiarity of people in this district with their practitioners, attention has been paid to avoid revealing their actual identity in Table 6 and in presenting findings. For example,

reference to “medical specialist” denotes the obstetrician and paediatrician who were interviewed.

Table 6. Description of sample of interview informants

<i>Settings</i>	<i>Practitioners</i>	
	<i>Professional</i>	<i>Lay</i>
Hospital Clinics	3 peri-natal clinic/maternity nurse including 1 trained as lactation consultant and one in training (P1, P3, P28) 2 medical specialists (obstetrician and paediatrician) (P22, P27) 1 dietician (P25)	
Primary Health Care	3 family physicians (P13, P18, P19) 3 nurse practitioner/primary care nurses (P6, P23, P29)	
Women’s Homes	8 public health nurses ³⁹ (P9, P11, P12, P15, P16, P21, P24, P30) 2 CPNP coordinators (P7, P26) ⁴⁰	
Community	1 CPNP coordinator (P4) ⁴¹ 1 public health nutritionist (P2) 1 nutritionist/ policy analyst (P10) 2 coordinators of rural health centres include a First Nations community (P14, P17)	1 CPNP peer leader (P8) 2 LLL leaders (P5, P20)
Total of informants	27	3

³⁹ Public health nurses deliver group prenatal classes as well as home visits to new mothers.

⁴⁰ CPNP staff in rural areas makes home visits to mothers and to a lesser extent hold programs which bring women to the family resource centre.

⁴¹ In Antigonish, home visits are made by CPNP staff but emphasis is placed on mothers attending programs at the family resource centre.

The sample reflects practices of a wide diversity of practitioners involved in the promotion and support of breastfeeding in the health district. I would have preferred to have interviewed more lay practitioners but was limited to the three people who were identified as lay sources within this district. The small number of lay informants, while limiting my ability to draw comparisons between lay and professional providers of breastfeeding information, reflects the priority given to professional breastfeeding advice in this district. Similarly, interviews with more rural based physicians would have added to data reflecting breastfeeding promotion practices in rural settings. However, the difficulty I encountered in gaining access to rural physicians was consistent with comments made by informants that rural physicians tended not to be well integrated into the perinatal continuum of care in the district. Perspectives of more practitioners on breastfeeding promotion practices with First Nations women would also have added to my data. However, there were few practitioners in this practice setting.

The final sample was comprised primarily of female practitioners with only three males interviewed. Only 4 of the 30 reported having less than 10 years of practice experience while 12 had more than 20 years. All but two informants said they had personal experience feeding babies and they referred to their own children. Participants were not directly asked how they fed their children but most volunteered this information. Twenty-one female informants reported having personal experience with breastfeeding. In addition, the three male practitioners mentioned that their children had been breastfed. Only two female practitioners said they had bottle fed and one of these had breastfed her second child.

3.5.1.4 The interview process

In-depth personal interviews, using a conversational style (Patton 2002), were conducted with professional and lay practitioners involved in activities aimed at promoting and supporting breastfeeding within the health district. I encouraged free flowing conversation with prompts as appropriate using an interview guide as an aide memoire (see Appendix E). Topics to explore were listed in one column. In the second column, potential points of discussion were listed. I often checked off or made notes beside these points as a reminder to myself that they had been raised as the conversation proceeded.

I piloted the interview schedule in order to determine if my questions could be understood by participants and to solicit feedback on certain aspects of the interview—such as the use of vignettes. As well, I wanted to ascertain the extent to which the conversation flowed naturally. I also wanted to identify approximately how long the interview would take and make sure that the technical aspects of my recording system worked well. Pilot interviews were conducted with two public health nurses who had experience in breastfeeding promotion. My choice of public health nurses for the pilot was a pragmatic one. Of all provider groups from which I intended to draw interview informants, the pool of public health nurses was the largest. Both informants provided feedback at the end of the interview on the interview process. Based on feedback from the first interview, I made some minor adjustments in wording. During this interview, there was a problem with the connection on the tape recorder which was corrected before the next interview. The second interview was included in sample.

Most interviews lasted between 60 and 90 minutes. Before beginning each interview, I explained the study to informants using the information letter that they had been previously sent to them, and I then obtained their signed consent to participate. All interviews were audio-taped and I made occasional notes by hand on the interview schedule. After the interview, I wrote general impressions in my research journal as well as key insights and points to pursue in subsequent interviews.

At the end of each interview, informants were asked if they would like to receive a copy of the transcript or, if not that, then a summary of the interview. Only one person requested the full transcript and two a summary of the transcript. When I followed up with these informants, none had changes to make. The purpose of this offer was to affirm their input and to support transparency in the interview process. It was not intended to serve as a form of validity check. Member checking is a common technique used as part of qualitative interviewing. Despite its wide application, I considered that the burden it would place on participants (in my case busy health practitioners) to review transcripts and the limited evidence supporting its value in reducing errors in interpretation of interview data (Murphy and Dingwall 2003) did not warrant its use.

Skilful use of qualitative interviews is considered a means of “uncovering the meanings, beliefs, understandings, and cultures of informants” (Murphy and Dingwall 2003, p.93). Although personal interviews can provide rich descriptions of informants’ perspectives on their experiences, Murphy and Dingwall caution against accepting claims that informants’ talk represents why they behave in a

particular way. These authors argue that there is likely to be a degree of ambivalence and not always clarity in thinking about the subject in the talk of informants. For example, informants may shift their position as they talk about a particular issue during the interview. Furthermore, informants are likely to want to portray themselves as competent when they give accounts of their experiences or practices. Charmaz (2006) has suggested that interview stories provide “accounts from particular points of view that serve specific purposes, including assumptions that one should follow tacit conversational rules during the interview” (p.27).

The interview reflects what both the interviewer and the participant bring to the interview. On my part, I attempted to be non-judgemental in leading the interview in order to minimize any sense among informants that they were expected to respond in a particular manner. For the most part, I found practitioners to be very candid in their conversation, especially about their lack of clarity around the meaning of health literacy. Many were also very open about the tensions they experienced in promoting breastfeeding such as in situations when their advice was not accepted. Nevertheless, I fully accept that their talk represents an account of their practice rather than an objective reproduction of the reality of their practice as Murphy and Dingwall (2003) point out.

Each of the 30 interviews began with informants briefly describing their background, including their occupation, total years of practice, total years of practice as a provider of infant feeding information, and any personal experience feeding babies. This gave me a general profile of the sample as previously described in the section 3.5.1.3. As noted, I did not choose to ask them directly if

their children had been breastfeed. Recognizing the judgemental nature of infant feeding decisions, I did not want to highlight their personal choices at the beginning of the interview. Nevertheless, most informants volunteered this information. I did ask them, however, if they had ever heard of health literacy and over two thirds responded that they had. In most cases, they referred to health literacy efforts associated with the university-community collaborative research project that had been recently undertaken within the health district (Gillis 2007). Only three informants responded that they had never heard of health literacy.

In keeping with the conversational style of the interview, I used the interview guide to engage informants in talking about their breastfeeding promotion practices with a particular focus on health literacy, i.e. how women access, understand and use information in making decisions about feeding their babies. I used a four-stage reflective process as a frame for interviewing guided by the questions of “what”, “why”, “so what” and “now what” (Labonte and Feather 1996). This process was intended to engage informants in describing their experiences, analysing them, reflecting on them, and suggesting further action. Although not rigidly applied, this approach enabled a normal flow in the conversation and natural transition from one topic to another in most interviews.

Most informants engaged in candid and open conversation about their breastfeeding promotion practices. Indeed, the focus of our conversations tended to be on breastfeeding and not on health literacy. It became apparent to me that, in most cases, breastfeeding promotion was a more salient concern than health literacy as they talked about their practice. I found myself frequently asking, “so

what about health literacy?” or “so what about those women who have difficulties with the written word?”. While my intent was to identify how practitioners incorporated dimensions of health literacy within the context of their breastfeeding promotion, I found that informants talked less about health literacy and more about breastfeeding and their difficulties in increasing breastfeeding initiation and duration among women in this district. Murphy and Dingwall have pointed out that while interviews are sometimes referred to as conversations with a purpose (2003, p.89), the researcher’s purpose may not be the same as informants.

At the end of each interview, I used a series of four vignettes as a strategy to prompt discussion of potential implications of health literacy for breastfeeding promotion practice (see Appendix F). The vignettes were developed by drawing direct quotes from transcripts of seven audio-taped focus group interviews conducted in 2000 with mothers in the health district to explore their experiences related to infant feeding decisions (Gillis and Fawcett 2001). Vignettes are reported to be useful for grounding discussion in concrete examples rather than abstract views (Green and Thorogood 2004). They can also be effective in enabling informants to discuss issues in a non-personal and less threatening way and help elicit assumptions underlying how they address the issue under discussion (Murphy and Dingwall 2003).

I tested the appropriateness of the vignettes for inclusion in my interview guide in pilot interviews with public health nurses. In each pilot interview, I included eight vignettes—reading each and asking for the participant’s reflections on the

situation presented. At the end of the full interview, I asked the pilot informants for their feedback. Based on their assessment, I selected four of the eight vignettes and included them in subsequent interviews. The same four-stage reflective process used to guide the conversation during the interview was applied in discussing the vignettes. Except for a few cases, informants talked about the relevance of each vignette to their practice. Often their responses reflected concerns about issues of maternal autonomy and the capacity of mothers to access and use information to support breastfeeding.

In closing the interview, I asked informants what, in general, they thought the concept of health literacy meant as it pertained to their breastfeeding practice. Although some struggled with articulating a meaning of health literacy, many practitioners offered suggestions which reflected diverse dimensions of health literacy as discussed in the following chapters (in particular, see section 6.5, p.316). Many informants said that they could see value in applying a health literacy lens to their practice. Of course, pointing to the value of incorporating health literacy into their breastfeeding promotion practice could have been merely a way for informants to show that they were in compliance with new thinking about practice. According to Murphy and Dingwall (2003), there is a tendency during such interviews for informants to portray themselves as competent. Rather than considering such talk from informants as a weakness in the data, however, Murphy and Dingwall have suggested that it should be treated as central to the analysis. Interview data can enable the researcher to identify what informants consider evident including “the normative context in which they operate” (Murphy and Dingwall 2003, p.97). These authors suggested, therefore, that

interview data should be treated as “displays of moral and cultural forms rather than as literal reports on reality” (2003, p.98). I considered this point highly relevant to my analysis of data from this study.

3.5.2 Observation in practice settings

While I selected the method of personal interviews to elicit practitioners’ perspectives on whether and how their breastfeeding promotion practices reflect facets of health literacy, I applied observational techniques to see how their provision of information and interaction with their clients reflected aspects of health literacy. Rather than employing a structured checklist approach to collect observational data, I was open to discovering how practitioners in their particular settings enabled their clients to access, understand and use breastfeeding information—broad categories reflecting the core components of health literacy.

Observation enables the researcher to collect information which is not filtered through the views of participants and to record information as seen (Creswell 2003). Because health literacy is a relatively new concept and not necessarily a conscious construct as practitioners go about their everyday practice, observing their interactions with clients was deemed an appropriate adjunct to interviewing them. Observation methods allow the researcher to record unremarkable aspects of everyday life that “interviewees might not feel worth commenting on and the context within which they occur” (Green and Thorogood 2004, p.132). The unusual and unanticipated can, however, also be captured (Creswell 2003). As noted by Mason (2002), through observation, the researcher can “experience and observe at first hand a range of dimensions in and of the setting” (p.84). The

strength of observational data is not only dependent on the attention and skills of the observing researcher; it can also be limited when participants perceive the researcher's presence as intrusive (Creswell 2003). As I discuss further in section 3.5.2.2 (p. 145), I was aware of these constraints and attentive to them in the process of observing. Next, however, I turn to a description of the settings.

3.5.2.1 Selection and description of practice settings

I observed in three practice settings in order to see the diverse situations in which practitioners were involved in the promotion of breastfeeding. My intention was to observe in settings which mirrored the four context categories for breastfeeding promotion interventions reported by Couto de Oliveira and colleagues (2001), i.e. women's homes, primary health care units, hospital clinics and the community (see section 3.5.1.1, p. 129). The first two settings were not amenable to my observation for pragmatic reasons. Although public health nurses and CPNP practitioners visit women in their homes, they did not consider it feasible for me to accompany them. Their concerns primarily related to my observation of their interactions with mothers of which breastfeeding promotion was only part of their counselling agenda. They were also concerned about protecting anonymity of mothers in this rural area. The difficulty in accessing primary health care physicians, even for interviews, precluded opportunities for observing their practices. I was able, however, to gain entry into three different practice settings of which one was within the hospital context and two within the community context. I negotiated access first with the senior health managers responsible for services in each practice setting and then with the practitioners who allowed me to

observe their practice. I collected observational data from the following three practice settings.

Ambulatory perinatal clinic at the regional hospital: Pregnant women from throughout the district meet with a perinatal nurse for pre-admission assessment and education prior to delivering their babies. The perinatal nurse provides perinatal counselling and education, including that related to breastfeeding, to all pregnant women attending the clinic⁴². I observed counselling sessions with four women during one morning and one afternoon. Because of the early discharge of mothers and newborns (within 48 hours in most cases), all childbearing women are expected to attend the perinatal clinic for pre-admission assessment and education. Childbearing and new mothers throughout the district travel to the clinic. Those from rural areas have to travel by car up to three hours to get there. Within a week after they have been discharged, mothers and newborns are expected to return to the clinic for infant feeding assessment, particularly if they are breastfeeding.

Prenatal education classes delivered by Public Health Services: Classes are offered by public health nurses one evening a week over four weeks to pregnant women and their partners or other companions such as mothers. In this setting, breastfeeding information is integrated with material on perinatal and infant care including preparing for birth and delivery. I observed during five classes which were part of two series delivered by a different public health nurse for each session. Classes were attended by expectant women and their partners or support persons. Although there are general guidelines for classes⁴³, the public health nurse leading the session was expected to design the class, i.e. determine what material to cover and how to present it. One class was held at the family resource centre in

⁴² In this study the terms “patient” and “client” were used to denote women who are recipients of information and services related to breastfeeding. Medical practitioners tended to refer to their “patients”. Practitioners in community settings were more likely to talk about their “clients”, “mothers” or “moms”.

⁴³ New provincial guidelines were released in 2007.

Antigonish. The others were held in the board/conference room in the PHS office which is attached to the regional hospital.

Weekly morning drop-in sessions for mothers: I observed during four morning drop-in sessions at the family resource centre as part of the Canada Prenatal Nutrition Program (CPNP). The CPNP is designed to support pregnant women and their babies up to six months of age. Funded by the federal government, CPNP promotes and supports breastfeeding among high-risk mothers through community-based efforts. The CPNP focus population includes women most likely to experience barriers to breastfeeding such as low literacy. National data reveals that of those women reached by CPNP between 1996 and 2002, 79% had fewer than 12 years of education and 21% had not completed grade 10 (Public Health Agency of Canada 2002). Besides the drop-in programme, CPNP staff offer home visits, nutritional counseling, milk and nutritional supplements, information sessions and breastfeeding support.

3.5.2.2 Observation process

In all cases, written informed consent was obtained from the practitioners in the practice setting prior to observing. Furthermore, clients with whom practitioners interacted were given the information letter outlining the study (see Appendix G). They were informed of why I was present, the purpose of my study and asked if they had any objections to my being present as an observer. After I had explained the study and addressed any questions they had, I asked them to sign a consent form. No one objected. A plain language poster was posted in every practice setting in which I observed (see Appendix H). This was helpful in reinforcing why I was there and was often referred to by practitioners in each setting as they introduced me and my study to their clients.

Mason (2002) has suggested that developing relationships can be difficult in observational settings. I was fortunate in that all practitioners in each of these three settings were very cooperative in providing opportunities for me to observe and making me feel comfortable. There were, however, some constraints to opportunities for observation in each of these practice settings. At the perinatal clinic, staffing issues and sporadic scheduling of clients limited the time I was able to be present. I did not attend classes in each of the two prenatal education sessions until the public health nurses leading the classes had explained the study to participants and obtained their consent for my attendance. Thus, I missed the first two classes in one session and the first class in the second session. Prior to my observation, I gave patients/clients a copy of the information letter, explained and answered questions, and obtained their written informed consent.

Field notes were recorded by hand during the observation event and fuller notes were typed up immediately after. I did not use a predefined list of items to tally what I observed. I did, however, consistently record features of the environment for example, the presence of printed health promotion materials such as posters, brochures and books; the physical layout of the setting, such as whether furniture was arranged to accommodate interaction; and characteristics of the people present, such as gender and relationships (e.g. mother with baby, pregnant woman with partner, young pregnant woman with mother). I did not have a fixed framework in mind to guide my observation but rather was attentive to observing the extent to which a concern for aspects of health literacy was reflected in practitioners' breastfeeding promotion efforts. More particularly, I concentrated on looking for evidence of whether and how practitioners enabled their clients to

access, understand and use health information—core components of the health literacy construct. During opportunities to observe, I wrote freely about what I saw and heard as practitioners communicated with their clients and as clients communicated with practitioners and with each other. I took particular note of ways in which the situation placed demands for functional literacy skills on clients, for example through the posting of printed notices of events and services, the request to complete questionnaires or assessment forms, and the presentation of print information on flip charts or posters which assumed a command of the written word. I was attentive to describing practices which appeared to be aimed at transmitting information to clients, noting the content, format and amount of the information. I noted examples of interactive communication between practitioners and clients, recording accounts of practitioners' efforts to facilitate interactive dialogue with their clients as they discussed infant feeding.

Although I did not have a structured framework to guide my collection of observational data in the three settings, I took note of practices which, upon analysis, reflected functional and interactive dimensions of health literacy. As the field work progressed and I engaged further with both the interview and observational data, I became more aware of practices reflecting functional and interactive notions of health literacy. Examples of these are included in my discussion of findings in Chapters 4 and 5. I was also interested in whether and how practitioners enabled their clients to appraise infant feeding information they provided and the extent to which practitioners addressed socio-cultural and economic conditions limiting their clients' capacity to act on the advice provided.

As discussed in Chapter 5, upon my analysis of data I found little evidence of practices reflective of a critical health literacy construct.

Emerson (1981) has pointed out two key factors influencing the trustworthiness of field data that should be attended to by researchers. The first is that the observed do not feel that the observer is significantly constraining their actions. In an effort to prevent my observation from being construed as intrusive or limiting to participants' usual interaction, I positioned myself, with pen and a small notepad in hand, discreetly at the back or to the side of the room in all practice settings. I also dressed in keeping with what I deemed to be the dress code for participants and I limited my interaction with the practitioner before and when they were communicating with their clients.

The second point made by Emerson is that the "data are obtained by observing interactions between group members rather than from researcher-member contacts" (p.361). My efforts to maintain my observer status and limit my role as an active participant speak to both of these concerns. In the perinatal and prenatal class settings, it was not overly difficult to maintain my observer status as I had limited interaction with individuals in attendance other than pleasantries. In these situations, the practitioners tended to be focused on providing information to their clients within the time scheduled for the consultation or class. This was not the case, however, during mothers' morning drop-in sessions in the family resource centre.

Observation in the family resource centre was most demanding because of the simultaneous interaction among mothers, babies, young children, staff and volunteers. As I noted in my journal after my first day observing in the family resource centre:

I felt good about this opportunity; however, the role of observer is difficult. I sat at the back and took notes while trying to be as inconspicuous as possible. My observing focused mostly on the atmosphere created for mothers to talk, share information, and support each other. (Diary entry, February 15, 2006)

This less formal and more highly interactive setting required me to be especially attentive to managing my roles as observer and participant. For example, in talking with mothers I tried to avoid discussing infant feeding so as not to be identified as a nutrition professional. On two occasions during one information session I was asked questions about nutrition by the coordinator. I kept my response to brief points as I wanted to limit my involvement as a resource person and regain my stance as a quiet observer. Murphy and Dingwall (2003) claim that “actual balance between participation and observation is never entirely within the control of the fieldworker” (p.57) and that “the craft lies in knowing when to lean in one direction and when to lean to the other” (p.57). I tried to confine most of my social interactions with mothers to casual talk about their babies and children. Because opportunities for note taking were limited to when the women were engaged in their group activity, it was necessary to write up observational details immediately upon leaving the centre. While still fresh in my mind, I recorded accounts of incidents occurring outside of the facilitated information sessions when mothers tended to share information and discuss concerns with each other or talk with the coordinator. How I integrated observational data into my analysis is discussed in section 3.6.2 (p.160).

3.5.3 Focus group interviews

Focus group interviews were conducted with mothers of young babies and with practitioner informants who had been interviewed previously. The purpose of these focus groups was to elicit feedback from mothers and practitioners on the preliminary findings. Once I had completed my data collection and early analysis, I sought their input as a means of confirming and challenging my observation of findings. I was also interested in what they considered implications for breastfeeding promotion practice from these findings. Two focus group interviews were held with mothers and two with practitioners.

A focus group is a small group of people who are brought together to discuss a particular issue. According to Kreuger and Casey (2000), six to eight people are an appropriate size and participants should be selected because they have something in common with each other. Discussion is guided by a skilled facilitator and usually lasts between one and two hours. Focus groups are considered to be useful for learning about participant opinions or attitudes rather than behaviours (Esterberg 2002).

I chose group interviews, rather than one-on-one telephone or face-to-face interviews, in order to maximize participant interaction and discussion about the findings. Esterberg (2002) has suggested that they can produce a rich source of data as members build on each other's ideas and opinions. Green and Thorogood (2004) have argued that, in contrast to one-to-one interviews, group interviews provide a more 'naturalistic' setting resembling the kind of interaction people have in everyday life. They have pointed to the particular value of this interaction

in health research “when we want to access not just how people talk to each other about health matters, but how knowledge about health is produced and reproduced in ‘natural’ social situations” (p.114). According to Green and Thorogood, focus group interviews have proved to be a useful data collection approach in both lay settings and health service settings. Furthermore, they contended that some sensitive issues may be more easily discussed in groups, depending largely on local cultural values. Given the sensitivity associated with breastfeeding—a culturally embedded practice—and also the social stigma associated with low literacy (see section 2.2.5, p.55), I considered focus group interviewing an suitable means of obtaining feedback from mothers and practitioners on the preliminary findings. Focus group interviews were considered especially appropriate for seeking feedback from mothers attending family resource centres because “they do not discriminate against people who cannot read or write and they can encourage participation from people reluctant to be interviewed on their own or feel they have nothing to say.”(Kitzinger 1995, p.299).

3.5.3.1 Informants’ focus group interviews

Two focus group interviews were conducted with practitioners who participated in the interviews to elicit their feedback on themes emerging from the preliminary analysis. I began by presenting highlights of my preliminary findings. Participants were invited to react to these findings, to the conceptual framework that I had developed, and to suggest any implications of the findings. The main purpose in getting their feedback was not for validation of findings but to engage practitioners in suggesting any implications from the findings for their practice and for future policy within the health district.

An invitation was sent to all practitioners who had been interviewed (see Appendix I). One focus group interview was scheduled in a community-based venue and another in a conference room at the regional hospital. My intent was to make it easy for both community-based and hospital based practitioners to participate. I also proposed a focus group in another part of the health district but it was not held because of lack of response. Refreshments were provided and travel expenses were covered. Since all participants had already consented to participate in the study, signed consents forms were not obtained for their participation in the focus group interviews.

The first informants' focus group interview was held in a community health resource centre. The eight informants who attended were all involved in community-based practices related to the promotion and support of breastfeeding. The second informants' focus group interview was held at the hospital. Five informants attended, four of whom practiced in the hospital and one in a rural community. In both sessions, discussion was rich and participants fed off each other's comments. Interviews were audio-recorded and later transcribed.

3.3.3.2 Mothers' focus group interviews

Two focus group interviews were conducted with mothers participating in the CPNP activities at two family resource centres within the district. Mothers were invited by the CPNP coordinators to focus group sessions for the purpose of providing feedback on the study based on their perspectives and experiences as mothers in obtaining, understanding and using infant feeding information. Prior to

beginning the group interview, I explained the aim of the study and purpose of the focus group interview. All participants were given a copy of the information letter describing the study (see Appendix J). A plain language poster was also posted and copies made available to mothers (see Appendix K). After explaining the study and addressing any questions, I asked them to sign the consent form (also in Appendix J). I facilitated the sessions by first highlighting findings using a flip chart for key points. I invited their feedback on these points as I presented them and encouraged discussion throughout the presentation, and at the end. Mothers' travel expenses were covered by CPNP and I provided refreshments.

The first focus group interview was held in a rural-based family resource centre with invitees coming from communities surrounding the centre. Although five people were scheduled to attend, three mothers called just prior to the start of the session with reasons why they could not attend. Despite the small number of participants, I conducted the interview with two mothers, one who was breastfeeding her baby and the other one bottle feeding, along with the CPNP coordinator, a breastfeeding mother. The second mothers' focus group interview took place at the family resource centre located in a larger town. Six mothers and the CPNP coordinator participated. Both group interviews were audio-recorded and later transcribed. In the next section I discuss how I managed data collected using these multiple methods and the process of data analysis.

3.6 Data management and analysis

The bulk of my data came from the personal interviews conducted with practitioners. Observational data were considered throughout my analysis of

interview data as I looked for comparisons and contrasts both across cases and across data sets. I found the observational data particularly valuable in enhancing my understanding of the varied contexts of breastfeeding promotion practices. In particular, these data gave me a sense of the pressures that practitioners faced in their efforts to promote and support breastfeeding amidst perceived demands to relay information to parents on a wide range of perinatal, infant care and family health issues. I also incorporated into my analysis data generated from focus groups of mothers and practitioners who had participated in personal interviews. Not only did this data provide important contextual information from the perspective of mothers, but the feedback from both mothers and practitioners on the preliminary findings was helpful in identifying implications of my findings for practice. As I proceeded with my analysis, I engaged with these multiple sources of data with the process of analysis being highly iterative as described in section 3.6.2 (p.157). First, however, I outline how I managed the data collected.

3.6.1 Data management

A large amount of data was generated through the multiple methods used for data collection. In qualitative research, data analysis begins with the first collection of data. Although I attempted to engage with the data in a way that enabled the seamless integration of data collection and analysis, this section focuses on the organisation and management of the data as collected.

The collection of my interview data began with my hand-written field notes made on the interview guide during the personal interviews. More complete notes were written in my journal following each interview to capture highlights of the content

and context of the interview and record insights pointing to emerging themes. The full interviews were transcribed verbatim by two people experienced in transcription, each of whom signed a confidentiality agreement to neither disclose the contents of the interviews nor reveal the identity of informants. By having two transcribers, I was able to have transcripts returned to me in a timely fashion. I then read each transcript while listening to the taped interview, making any corrections to the transcript along the way. This process allowed me to hear the voices of each informant interviewed while engaging with the transcribed text of the interview. I then condensed the interview transcript into a one to two page summary. Summaries of each interview transcript were shared with my two thesis supervisors at the University of Nottingham and my on-site supervisor in the Department of Adult Education at St Francis Xavier University. I provided my supervisors with monthly reports which included summaries of interviews and observations, other contextual information, and commentaries on the analysis as it unfolded. These documents served as a basis for telephone discussions with my supervisors from the University of Nottingham as the fieldwork progressed. I also met regularly with my on-site supervisor. These interactions with my supervisors served as a form of debriefing and a way to receive feedback during the fieldwork stage.

Correcting and summarizing the transcribed interviews while listening to the interview tapes helped me to engage with the interview data. I identified early patterns of themes across the interview data which informed both my ongoing interviewing as well as the selection of informants to interview. For example, a concern about health practitioners' use of terminology led me to add to the

interview schedule a question about the use of specialized terminology associated with lactation and breastfeeding. Likewise, because several practitioners referred to the influence of social support in supporting breastfeeding among women in First Nations communities, I sought out informants considered to be knowledgeable about breastfeeding interventions in these communities. As described in the next section, this was part of the concurrent processes of data collection and analysis consistent with the methods from grounded theory which I employed in my analysis.

Once all summaries were completed, I entered the interview transcripts into Atlas.ti qualitative data analysis software. Atlas.ti is a type of Computer Assisted Qualitative Data Analysis Software (CAQDAS) which allows the organisation and retrieval of data. I used this software extensively for coding, determining the frequency of quotations for specific codes, clustering codes into broader categories, writing memos, determining the frequency of quotations according to codes, and retrieving quotes during my analysis and write-up. The use of CAQDAS is particularly useful when the data set is large, as was the case in this study.

After several weeks of interviewing, I began my observation in selected settings. From my handwritten field notes, I produced electronic reports of my observations from selected practice settings. I did not enter the observational notes or transcripts of focus group interviews into Atlas.ti. Instead, they were printed and placed in binders which I referred to as I carried on with analysing the interview data using Atlas.ti. I manually highlighted and tagged notations in the binders and

wrote memos cross-referencing the interview and observational data in my research journal and in Atlas.ti.

Copies of print materials that informants reported providing to clients within the context of their breastfeeding promotion practice were inventoried. These were organised and stored in a filing box. All primary data from personal and focus group interviews were stored in a locked filing cabinet.

Throughout the entire inquiry process, I recorded details regarding arrangements for data collection and other research management issues in my research journal. I also used this journal as an audit trail of activities related to data collection, to capture ideas and insights as the analysis progressed and to track challenges and opportunities along the way. My several journal volumes were composed of jotted notes, lengthy reflections, reminders about data collection and analysis, concept maps, and ideas from my reading of the literature which I found particularly germane to aspects of my research (for examples of entries, see Appendix M). I turn next to describing the process of analysis.

3.6.2 Process of analysis

The analysis of data was an iterative process including the categorization of data, analysis of themes and refinement of the thematic analysis through writing and engaging with the literature. According to Pope, Ziebland and Mays (2000) analytical categories “may be derived inductively—that is, obtained gradually from the data—or used deductively, either at the beginning or part way through the analysis as a way of approaching the data” (p.114). I drew first upon methods

from grounded theory and then from framework analysis. These are two distinct methods of analysis.

While grounded theory is a methodology and a particular way of conceptualizing data, analysis procedures outlined in grounded theory can be used without taking on the full methodological approach with its goal to develop theory (Lacey and Luff 2001). Grounded theory often starts with a broad research question. As such, drawing from methods of grounded theory was appropriate to this examination of dimensions of health literacy—a concept for which there is no universally shared definition as noted earlier in Chapter 2. The second approach I chose, framework analysis, is frequently used to generate findings relevant to health policy and practice (Green and Thorogood 2004). It stems from applied policy research with its central aim of providing recommendations for future interventions, in contrast to building theory (Ritchie and Spencer 1994). Framework analysis was considered applicable to this study, given my focus on examining the extent to which dimensions of health literacy in the current literature were incorporated by practitioners in their efforts to promote breastfeeding. Whereas grounded theory allows theory to emerge from the data, framework analysis “allows for the inclusion of *a priori* as well as emergent concepts” (Lacey and Luff 2001, p.9). Using the concept map I had developed (see Figure 1 in section 3.3, p.101) and the emergent themes from initial analysis drawing on grounded theory methods, I turned to applying methods of framework analysis. A description of how I applied methods from these two approaches to my data analysis follows. I begin by outlining those drawn from grounded theory.

Grounded theory methods consist of the simultaneous collection and analysis of data with each informing and focusing the other throughout the process of inquiry (Charmez 2005). By beginning my analysis of interview transcripts before completing the data collection, I allowed emergent themes I gleaned from reading transcripts of early interviews to guide me in searching for new data. For example, a concern expressed by several informants about the lack of rural support for breastfeeding prompted me to seek out interviews with rural practitioners to explore further the socio-cultural constraints to breastfeeding in rural communities. In this way, themes derived from one phase of analysis informed my subsequent selection of informants, thus providing opportunities to enrich the data and deepen my insights into the issue.

In the process of thematic analysis, I applied the principle of constant comparison. This principle central to grounded theory refers to the notion that “interpretation of data moves forward through comparing indicators (codes), cases, and data sets” (Green and Thorogood 2004, p.181). I used this process of thematic analysis as I gathered data from different sources, comparing and contrasting data bits within and across the data sets. I began by engaging with the transcripts of personal interviews. As I collected data I incorporated into my analysis the observational accounts and data from transcripts of focus group interviews.

Three broad categories provided the starting point for examining the extent to which practitioners’ descriptions of their breastfeeding promotion interventions reflected dimensions of health literacy. These categories were access, understanding and use of information— core processes central to most definitions

of health literacy in the literature. Thinking about my data with respect to these core processes enabled me to identify themes reflecting aspects of health literacy and particular areas to explore further. One example of an emergent concept was that of informed choice. (See Appendix N for an illustration of data reflecting the theme of informed choice.) Early in the collection and analysis of interview data, I became aware of an undercurrent of tension as informants talked about the difficulties they encountered in providing breastfeeding promotion information to women in communities where family and community support for breastfeeding was lacking. In this instance, practitioners' comments reflected the conflict between promoting breastfeeding and respecting the autonomy of mothers in their personal thoughts and actions relevant to making infant feeding choices. As I listened to practitioners and read through transcripts of their interviews, I also identified thematic threads connecting the notion of informed choice with the concepts of normalization and moralization of breastfeeding (see section 5.2.2).

In incorporating observational data into my analysis, I referred back and forth between my observational notes and interview transcripts, writing memos about points of convergence and divergence across the two sets of data. The observational data thus informed themes I identified from my interview data which reflected dimensions of health literacy and, in particular, thematic threads reflecting aspects of functional, interactive and critical health literacy. In Chapters 4 and 5, I refer to examples from my observational notes to illustrate practices I observed in various contexts which link to aspects of functional and interactive health literacy.

Drawing from grounded theory, I continued with the process of constant comparison until I no longer saw the emergence of new thematic categories of significance—what is referred to as theoretical saturation. As noted in section 3.5.1.1 (see p.131), theoretical saturation is said to occur when no new insights are found, new themes identified, or new issues about a category of data arise (Bowen 2008). According to Charmaz (2005), grounded theory “entails developing increasing abstract ideas about research participants’ meanings, actions, and worlds and seeking specific data to fill out, refine, and check the emerging conceptual categories” (p.508). As a leading proponent of a social constructivist approach to grounded theory, Charmaz emphasizes the importance of reflexivity to the researcher. This means that the researcher is not considered as an objective observer but rather one who is aware of the interpretive lens which he or she brings to the analysis and to sample selection. According to Charmaz, “what observers see and hear depends upon their prior interpretive frames, biographies, and interest as well as the research context, their relationships with research participants, concrete field experiences and modes of generating and recording empirical methods” (2005, p.509). With an openness to learn what informants had to tell me about dimensions of health literacy through their descriptions of their breastfeeding promotion practices, I read and reread interview transcripts and observational accounts. While doing so, I was continually questioning what I brought to the analysis and the filters through which I interpreted the data. I was particularly concerned about my partial, but certainly not full, familiarity with the context in which the case study was set and also the knowledge and experience related to the issues of breastfeeding promotion and health literacy that I brought to the analysis (see section 3.2). It was essential that I be constantly aware of how

this prior knowledge rendered my interpretation of the data. I needed to challenge first impressions and pay deliberate attention to data which deviated from emerging themes—a key aspect underpinning the process of constant comparison. For example, while many practitioner comments reflected functional aspects of health literacy, others reflected literacy not as a concrete set of skills but rather as different ways of knowing including those not dependent on the written word. This was a critical insight as I deepened my exploration of the extent to which practitioners' engagement with notions of health literacy reflected various dimensions of health literacy in the literature as discussed in Chapters 4, 5 and 6.

While I drew from key principles and techniques of grounded theory for data collection and analysis, I make no claims that I applied a grounded theory methodology or that the outcome is indeed the development of theory. However as argued by Green and Thorogood (2004), many elements of grounded theory are valuable for the analysis of qualitative health research even though it may not be feasible to develop a saturated grounded theory. I found this to be the case during the first phase of my analysis. In the next stage of analysis, I drew upon techniques used in framework analysis.

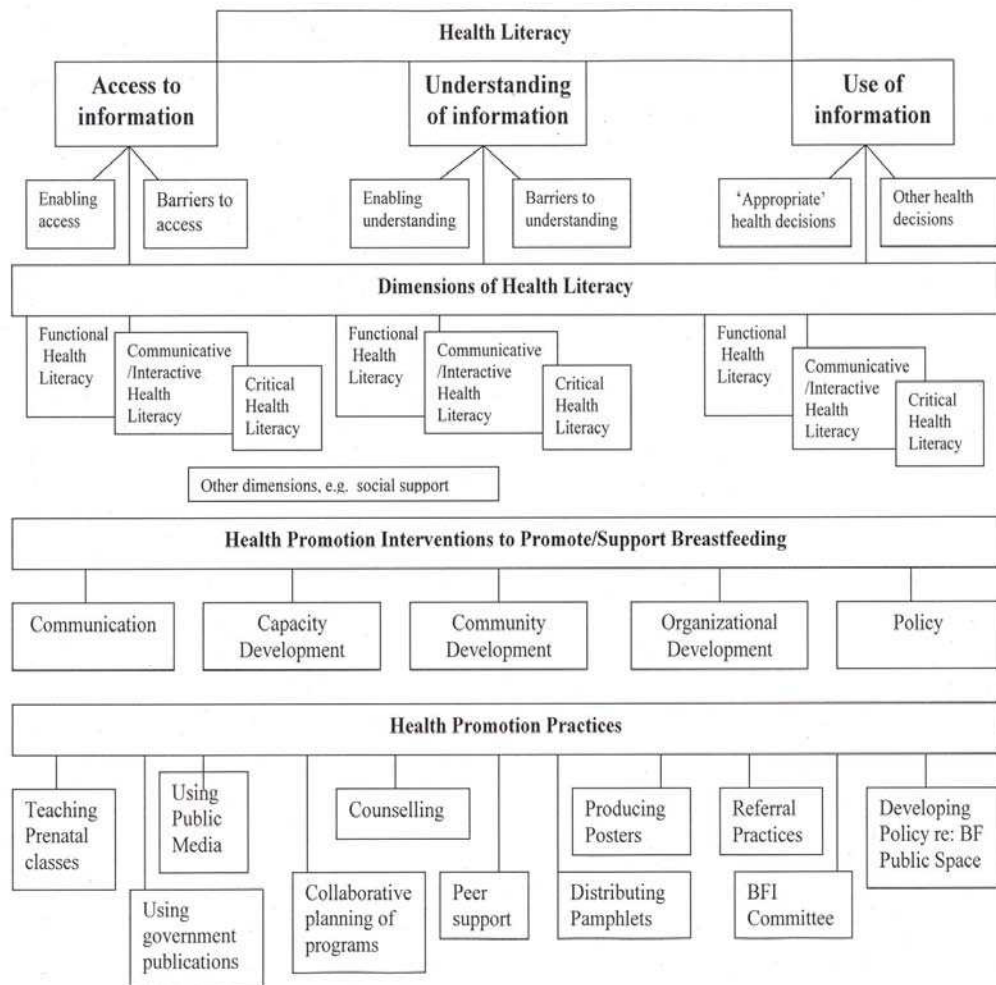
Methods of framework analysis helped me make clearer connections between the complex collection of emergent themes related to breastfeeding promotion practices and dimensions of health literacy as reported in the current literature—the central focus of my study. As Pope, Ziebland and Mays (2000) pointed out, “although the framework approach reflects the original accounts and observations of the people studied (that is “grounded” and inductive), it starts deductively from

pre-set aims and objectives” (p.116). Framework analysis consists of summarizing and classifying data within a thematic framework in a way that preserves the integrity of the respondents’ accounts throughout the analysis (Green and Thorogood 2004). Familiarisation with the data is the first step in framework analysis—this I achieved by applying methods of grounded theory. Drawing from the emergent themes derived from my initial analysis and the concept map developed for my proposal (see page 101), I developed a coding framework. This framework is presented in Figure 4 on page 164.

Using this framework, I identified and compared bits of data within and across the cases from my two key data sets. For each interview case, I charted on flip chart paper relevant quotes from interview transcripts under themes and sub-themes using the interview participant code and the line number from my Atlas.ti coding as identifiers. I also included excerpts from my observational data with observation identifiers and page numbers. Data generated from the transcripts of mothers’ and practitioners’ focus group discussions were compared with themes emerging from the interview and observational data. I inserted key phrases and identifiers for excerpts from the group interview transcripts on the framework analysis chart.

This iterative analysis process enabled me to identify the extent to which practitioners’ accounts of their breastfeeding promotion practices reflected Nutbeam’s typology of functional, interactive and critical health literacy. In my search for deviant cases, I identified outlying themes which I recognized as

Figure 4. Coding framework



reflecting an extension in thinking from Nutbeam's health literacy model. I identified, for example, themes which were in keeping with the notion of health literacy as composed of multiple literacies. I noted evidence of perspectives of providers which reflected the ideas of scientific, cultural and civic literacy as dimensions of health literacy. Tensions underlying the operationalisation of the concept of health literacy by practitioners also became more apparent in this stage of the analysis, and more so as I became entrenched in writing about the findings.

As a form of debriefing, I sought feedback on drafts of the analysis chapters from my two supervisors at the University of Nottingham and my on-site supervisor in

Canada. From their various disciplinary perspectives, including that of sociology, health science and adult education, they provided a range of suggestions for reflecting further on thematic strands and refining the meaning I was deriving from the findings.

Appendix N provides an example of how I drew findings from my multiple sources of data— including interviews with practitioners, observation in selected practice settings and focus group interviews with mothers and practitioner informants— along with how I integrated insights from journaling and debriefing with my supervisors.

3.7 Ethical considerations

This study addresses two issues which may be considered of a sensitive nature to certain groups of people, i.e. the issues of breastfeeding and low literacy. Except for focus group interviews conducted with mothers, my research did not include vulnerable groups for whom these issues are likely to be a source of particular sensitivity. During focus group interviews with mothers, I was aware of the possibility that some participants might not have adequate literacy skills to read the information letter or consent form. I therefore read aloud this information to all participants. In addressing issues pertaining to literacy and breastfeeding, I was attentive to the possibility that some participants might not be comfortable with the discussion. I attempted to use plain language and communicate in a non-judgemental way. There was no indication of any discomfort among participants.

In reporting on findings, I have taken the utmost care not to include information that may reveal the identity of individual participants when findings are discussed and participant quotes used.

3.8 Trustworthiness of findings

Establishing the trustworthiness of findings from qualitative research is hotly contested in general, and more specifically, within the context of research relevant to health practice. According to Mays and Pope (1995), “As in quantitative research, the basic strategy to ensure rigour in qualitative research is systematic and self-conscious research design, data collection, interpretation, and communication” (p.109). Much of the debate about assessing the quality of qualitative research centres on the extent to which criteria should parallel or differ from that used in assessing quantitative research. Meyrick (2006) has suggested that among the many challenges in determining the trustworthiness of qualitative health research is an emphasis on techniques and the need to put forth tests of rigour derived from quantitative research criteria. He has argued that difficulties in defining criteria for rigour in conducting and reporting qualitative research stem from the mismatch between multidisciplinary models of health which focus on health disparities and the priority given to bio-medically defined evidence. Although the need for achieving rigour in qualitative health research is well recognized in the literature, there is no agreement on specific criteria for testing the robustness of evidence derived from qualitative inquiries into health practice issues (Spencer et al. 2003). While some strive for criteria reflecting rigid requirements for assessing qualitative research, others are more comfortable with general guidelines for good practice (Dixon-Woods et al. 2004). According to

Popay, Roger and Williams (1998), there is “no absolute list of criteria as to what constitutes good qualitative research” (p.344).

Mays and Pope (1995) have supported a checklist approach to assessing rigour in qualitative health research, although they have stated that “It would be unwise to consider any single set of guidelines as definitive” (p.52). Murphy and Dingwall (2003) are not convinced of the merits of “a list of requirements for the proper conduct of qualitative research studies” (p.204). Instead, they have argued that rigour can be demonstrated through presentation of evidence reflecting the systematic search for contradictory evidence to claims about the research. In an appraisal of qualitative research for inclusion in a systematic review of evidence on support for breastfeeding, Dixon-Woods et al. (2007) concluded that checklists and similar structured approaches to assessing qualitative research “are far from a straight forward solution” (p 42). In their discussion of criteria for assessing evidence derived from qualitative research, Spencer et al. (2003) have drawn a distinction between practical research and scientific research—an argument originally made by Hammersley (2003). Spencer et al. have asserted that in contrast to scientific research’s aim to contribute to knowledge primarily accessed by researchers, practical research “aims to produce knowledge of practical use to practitioners or policy-makers who assess the findings in terms of relevance, timeliness and validity—being judged according to the plausibility of the findings in relation to *practical knowledge and experience*” (italics in original) (Spencer et al. 2003, p.30).

My standpoint as a researcher is not in keeping with a checklist approach to assessing qualitative research. I consider the adherence to a structured set of criteria to be reflective of a quantitative research paradigm and contradictory to the fundamental nature of qualitative research, the ultimate aim of which is to “provide an in-depth understanding of people’s experiences, perspectives and histories in the context of their personal circumstances or settings” (Spencer et al. 2003, p. 17). Among the central principles underpinning a framework for assessing qualitative health research evidence developed by Spencer et al. is the requirement that research be “**Rigorous in conduct** through the systematic and transparent collection, analysis and interpretation of qualitative data” (p.20)” (bold in original).

In this chapter, my goal has been to demonstrate how I, as the researcher, have strived to achieve a standard of rigour by describing how I systematically and transparently conducted my study. I have discussed the various sources of data and methods selected for their collection in order to achieve the study objectives. Murphy and Dingwall (2003) have supported the use of multiple data collection methods in an effort to search for contradictory evidence, a critical aspect in achieving rigour in qualitative research. In striving for rigour in my study, I compared and contrasted data from my multiple data sources, noting with memos the convergence and divergence of emerging themes from cases within and across different sources of data. At the onset of this chapter, I made clear my standpoint as a reflexive researcher and my concerns about being sensitive to ways in which my experiences and viewpoints could influence the data collection and analysis.

A large section of this chapter has been devoted to describing the geographical location, characteristics of the population, and the organisational and policy context in which the case study was set. Illuminating the context in which the study is situated is seen by authors such as Yip (2003) and Stake (2005) as an imperative in presenting qualitative case study research. According to Popay, Rogers and Williams (1998), “qualitative research seeks to maximize the use of context as a means of locating lay [and practitioner] knowledge and understanding subjective meaning”(p.346). The planning and execution of this study and the analysis and presentation of findings has been embedded within and responsive to the circumstances in which the promotion of breastfeeding was undertaken and health literacy has been emerging as a concern in one rural Canadian health district. I purposefully sought out practitioners to interview and settings in which to observe practices relevant to breastfeeding promotion and health literacy. By drawing on principles of grounded theory, I applied a theoretical sampling approach. Engaging in the analysis of interview data as I collected it, guided my search for new data. Whereas my findings are reflective of the practice perspectives, experiences and contexts in one health district, insights from this study are likely of relevance and transferability to practitioners and researchers in other settings who are concerned about integrating the concept of health literacy into their health promotion practice and also struggling with the complexities of breastfeeding promotion.

To help both qualitative health researchers as well as those applying findings from qualitative studies, Meyrick (2006) proposed a framework for assessing qualitative research which incorporated a range of epistemological and ontological

standpoints and was grounded in two core principles of quality of qualitative research: transparency and systematicity. I have aimed for transparency in this chapter as I described the ways in which I systematically collected and analysed my data. I have also provided details about the geographical, demographic, organisational, and health policy context in which the study was set. In the next three chapters, I continue to aim for transparency in the presentation of my findings for example, by including contextual descriptions, extensive quotes from interview participants, excerpts from observational accounts of their practices and quotes from transcripts of focus group interview with mothers and previously interviewed practitioners.

3.9 Summary and conclusion

In this chapter I have accounted for the methodology and the methods used to carry out my research. I began by laying out my standpoint as the researcher, why I chose to use qualitative research and why I selected a case study approach in particular. I then described the context in which the case study was set. The specific methods I used to collect my data were outlined and justified. I also described my engagement in the analysis of my data by drawing on elements of grounded theory and framework analysis. I discussed ethical considerations in conducting and reporting on my study and lastly, I addressed the issue of the trustworthiness of my findings.

In the next three chapters, I present my findings drawing from my thematic analysis of multiple data sources as I examine the extent to which breastfeeding promotion practices reflect three diverse approaches to health literacy as identified in the current literature. I begin in Chapter 4 by examining the extent to which

findings reflect practitioners' efforts to promote breastfeeding in ways consistent with the concept of functional health literacy. In Chapter 5, I focus on the extent to which the evidence supports practitioners' engagement with Nutbeam's notions of interactive and critical health literacy. In Chapter 6, I examine the extent to which themes from reported and observed practices reflect dimensions of health literacy which reflect an extension from Nutbeam's model of health literacy by incorporating the idea of multiple literacies.

Chapter 4

Reflections of functional health literacy in practice

4.1 Introduction

This is the first of three chapters in which I examine the extent to which practitioners' descriptions of their breastfeeding promotion practices, and observed practices in selected settings, reflect various dimensions of health literacy in current literature. In it, I examine the extent to which practitioners identified functional health literacy as a concern as they talked about their practices, and whether and how their descriptions of their breastfeeding promotion efforts and observed practices reflected strategies used to accommodate and/or enhance their clients' functional health literacy. I also examine what tensions and barriers related to addressing functional health literacy they identified as they described their practices.

4.2 Practitioners' concerns about functional health literacy

The first section of this chapter examines the extent to which practitioners' talk reflected their recognition of functional health literacy as a concern relevant to their breastfeeding promotion practice. There is much debate in the literature about the extent to which functional health literacy should be considered a distinct concept or as a form of literacy applied within the health context. Functional literacy by definition is context dependent. Nutbeam defined basic/functional literacy as "sufficient basic skills in reading and writing to be able to function effectively in everyday situations" (2000, p.263) and suggested that this is broadly compatible with defining functional health literacy as "being able to apply literacy

skills to health related materials” (Ad Hoc Committee on Health Literacy 1999, p. 552). Zarcadoolas, Pleasant and Greer (2006) argued that one cannot understand health literacy without understanding literacy. Grabill (2003) asserted that it is impossible to understand literacy in the abstract; rather, it needs to be looked at within its practice context. I agree with these premises and begin my examination of how practitioners’ descriptions of their breastfeeding promotion practices reflect a concern about functional health literacy by looking first at what they said about literacy.

4.2.1 Practitioners’ perspectives on literacy

Interview participants were not given a specific definition nor directly asked to specifically define health literacy or literacy. It was not until the end of the interview that I asked them what, in general, they thought health literacy meant. During our conversations about their breastfeeding promotion practices, however, I frequently asked them ‘so what about health literacy?’. In their responses, they incorporated various notions of literacy. Different practitioners offered different views on literacy and, rarely, did they make a distinction between literacy and health literacy.

Most practitioners suggested that literacy is an ability that starts with basic reading and writing skills. For example, one hospital-based nurse and breastfeeding advocate said, “*Literacy and reading that is all I think—literacy and reading*” (P23, 446). While most comments centred on the idea of literacy as reading ability, several practitioners also suggested that literacy expands from individuals’ ability to read the printed word to include other skills and ways of knowing

through which people make meaning of their world. For instance, a family physician said that “*understanding the verbal word is part of literacy too*” (P19, 227). Literacy was mentioned even more broadly as an ability to derive meaning by various ways. As one medical specialist suggested, “*I don’t necessarily see literacy as reading; it is just learning from many different ways*” (P22, 242). I further explore how their description of their practices reflected health literacy through other ways of knowing in Chapters 5 and 6. In this chapter, however, I focus on health literacy from the perspective of basic literacy skills implicit in the term ‘functional health literacy’.

Talking about basic literacy ability did not come easily to most practitioners, nor did it appear to be at the forefront of their descriptions of their efforts to promote and support breastfeeding. One CPNP coordinator in a rural community claimed that practitioners easily overlook the issue of literacy even when confronted with it directly in their practice. She said, “*You do not think about it and even sometimes when we are faced with the issue we don’t even see it in front of our face because we are not thinking about it*” (P26, 442).

During our interviews, many participants were tentative as they broached the topic of literacy—a preliminary sign to me of their discomfort with this issue. However, as our conversation proceeded, most became more engaged in talking about literacy from the perspective of what it enables people to do in their everyday lives. The following sequence of comments by this CPNP coordinator reflects how, during our interview, her idea of literacy broadened as she moved from literacy as reading to notions of its functionality. She started off by saying, “*I guess reading is literacy, so being able to read and understand from reading how*

to take care of your health” (P26, 062). In pondering how someone with limited literacy can manage in situations requiring them to read, she said, “if you can’t read, how are you going to understand, unless someone explains it to you and what if you forget?” (P26, 066). Later in the interview, she expressed concern about the extent to which low literacy may indeed limit one’s ability to communicate in all aspects of daily life as she said, “Literacy affects everything, I think, everything. I can’t imagine being in this world and not being able to read. That is a whole form of communication right there that you would be missing out on” (P26, 238). Her idea of the instrumental nature of literacy evolved further as she speculated on how the lack of literacy may compromise one’s access to information, and consequently result in increased dependency on others.

If someone cannot read, they need to rely on other people to communicate that information to them in some way. If they are tricky enough, they might be able to do that. And then you have to rely on the other person to give you the correct information without bias too. (P26, 314)

Like the above reflections, most practitioners focused on literacy from a deficit perspective, i.e. how a lack of literacy can impede one’s access and understanding of health relevant information. A public health nurse contended that limited literacy prevents people from accessing information on many health topics, including infant feeding. She said, *“I guess I just see information on any health topic being limited to people that have problems with literacy, whether it’s immunization or signing a consent form or infant feeding and breastfeeding would be a part of it” (P11, 494). Another public health nurse talked about literacy as impacting all aspects of life, not just breastfeeding: “We need to deal with the issues of literacy around breastfeeding; we need to deal with literacy in general... being able to function day to day” (P12, 315).*

The above comments reflect a concern about how the lack of literacy skills can limit one's ability to operate in daily life. This primary care nurse pointed to the tendency for practitioners to view literacy from the perspective of what people cannot do, rather than what they can do. She said, "*I think the perception is a deficit. That is not the way I like to work with it though. I think it [literacy] is a capacity builder*" (P29, 294). Her comment mirrors the fundamental difference between a capacity-centred versus a deficit-centred approach to framing literacy. Capacity centred, as seen here, emphasizes the critical role of literacy in personal development and autonomy (Sen 2000). This viewpoint is also consistent with Nutbeam's (2008) distinction between deficit and capacity-based approaches to health literacy in which he suggested that functional health literacy traditionally has focused on the literacy deficits of patients, not on how their capacity can be enhanced through practice interventions. This point is elaborated upon in Chapter 5 when I discussed the extent to which practitioners' talk reflected the notion of capacity building in Nutbeam's concepts of interactive health literacy and critical health literacy.

In summary, these findings do not reflect a shared or universal understanding of the concept of literacy among practitioners involved in the promotion of breastfeeding. Many practitioners talked about literacy as including, but not being limited to, one's reading and writing ability. Although practitioners referred to the importance of literacy skills in enabling people to function in their everyday lives, most of their comments reflected notions of literacy from a deficit perspective.

I now turn to examining two health communication issues related to functional health literacy which appeared in their talk: the readability of materials and the

use of specialised terminology. I begin by examining the extent to which practitioners recognized the readability of print information as a concern within the context of their breastfeeding promotion practice.

4.2.2 Concern for readability of print materials

In describing their breastfeeding promotion practices, practitioners frequently referred to how they disseminated and used print sources in promoting breastfeeding. As discussed further in the next chapter, expectant and new mothers are the target of a large amount of print material on infant feeding and other aspects of perinatal and infant care. Pamphlets and booklets used in the health district were distributed to women primarily through public health services, the perinatal clinic, and CPNP at the family resource centre. Although many practitioners mentioned readability of commonly used publications on infant feeding produced by the provincial government when talking about their information provision practices, they were divided on the extent to which they identified readability level as a problem.

Some practitioners appeared of the opinion that most print resources on breastfeeding are written at a level which most people can read. One public health nurse for example said, *“I think the resources we have now, they are all really geared to a lower level of literacy”* (P24, 114). Another public health nurse agreed that key resources are written at an appropriate level:

The Breastfeeding Basics book is... user friendly according to the size of it and there's graphics and it's not a lot of words on each page, that type of thing. As far as the literacy rate, age or grade ...usually they're done at a Grade 5 or 6 level and I'm not sure what that one is but you know that one is not a bad one. (P16, 53)

However, others suggested that many resources are written at a level that may surpass the skills of some readers. For example, a LLL leader said, *“I would consider most of them well up the literacy scale”* (P5, 101). In comparing resources in this district to those she previously used, a public health nutritionist said, *“I really found that the resources related to infant feeding were very complex in my opinion based on other resources I have used in past experience”* (P2, 11). In her next comment, she implied that practitioners tended to focus on the provision of infant feeding information to mothers with little regard for their functional health literacy:

I think it [health literacy] is a huge issue, especially in infant feeding because of the resources we provide. I think there is a tendency to think well if we provide them with all the information they can do it or if we give them a booklet they will read it and it is too high a level. (P2, 19)

The claim that key infant feeding resources used by practitioners have a high level of readability is consistent with my assessment of these resources. I assessed the readability of three print resources on breastfeeding and other aspects of infant feeding published for parents by the Nova Scotia Department of Health.

Readability scores for each were determined using the SMOG (Statistical Measurement of Gobbledygook) and the Fry Readability Formula (Osborne, 2004). The table summarizing my findings can be found in Appendix O. Based on my assessment, readability for all three publications was above the Grade 5-8 level ⁴⁴, the level frequently suggested for consumer health publications (Osborne 2004). It is noteworthy that, at the time of this study, a review of parenting resources was undertaken as part of the development of a province-wide

⁴⁴ Grade 5 represents 6 years of schooling in the Nova Scotia education system. Children enter primary at age 5 years and then progress to Grade 1 through to Grade 12.

public health intervention⁴⁵ for high risk parents. Parents participating in focus group interviews identified breastfeeding among six priority topics where information was needed. Authors of the final report recommended that resources be written to a grade five reading level or lower and that illustrations and plain language be used (Lilley and Price 2005). Based on this provincial review, the development of a new age-paced series of resources for parents was undertaken by the provincial health department.

Physicians were less likely to report distributing government produced booklets and other print materials to their patients. However, one family physician and advocate of breastfeeding said, *“I promote books on breastfeeding whether they could read them or not”* (P18, 097). He went on to suggest that physicians give little attention to their clients’ level of basic literacy skills when they provide them with information. He said, *“It’s more here, take this or here’s a handout or here’s a website or here’s a book [even] if they can’t access it or they don’t know how or they can’t read or write”* (P18, 181). It is noteworthy that practitioners in this study consistently referred to physicians as the most common source of information that expectant and new mothers turned to for infant feeding advice.

In summary, the high level of readability of commonly used infant feeding resources was not talked about as a major functional health literacy concern by most practitioners, despite evidence that concerns had been raised and changes were underway by the provincial government to modify infant feeding publications to better address the needs of parents with lower reading ability. I

⁴² Healthy Beginnings Enhanced Home Visiting Program

now turn to another aspect of health communications, the practitioners' use of specialised terminology in promoting breastfeeding.

4.2.3 Concern for use of specialised terminology

Practitioners were again divided as they talked about their use of terminology in written and oral communications with mothers about breastfeeding. Whereas some viewed breastfeeding as a topic demanding little in the way of specialised terminology, others recognized that terms associated with breastfeeding may not be familiar to all expectant and new mothers.

Some practitioners talked about breastfeeding as a straightforward issue which can be easily discussed using simple language. For example, one family physician claimed that she does not use specialised terminology in talking to patients about breastfeeding.

When you discuss breastfeeding with people you completely use lay terminology. It is so apple pie. It is harder to use regular terminology when you are talking about other things in pregnancy because they are so medical. (P19, 23)

In contrast, many practitioners spoke about terms describing breastfeeding which are likely to be unfamiliar to expectant and new mothers. One public health nurse listed an array of specialised terms: *“Well there’s all kinds of words—colostrum, areola, like you know there’s lactiferous sinuses...”* (P16, 109). Another public health nurse said, *“I think [we] health care practitioners generally do have our own speakease. We communicate in a language that isn’t always understandable”* (P21, 37). A hospital maternity nurse expressed her concern about the lack of clear language health professionals use in communicating with mothers as follows:

I have to use every day language instead of this jargon of the medical profession and we think that that's a big enough step for us to have taken, whereas it may not be. That still may not get us down to the level that we need to get the message across, we still may be complicating it too much.
(P1, 256)

While acknowledging the importance of avoiding use of complex terminology, she implied that there is more to communicating health information clearly than just avoiding specialised terminology. Her comment spoke to the challenge that practitioners face in not only avoiding professional jargon but also tailoring messages that are meaningful to their patients and clients.

In summary, practitioners' talk about the use of specialised terminology in their breastfeeding promotion practice reflected a concern for functional health literacy by some practitioners but not all of them. I now look at the extent to which practices I observed in selected settings reflected practitioners' concern for the situational demands for functional health literacy that they placed on their clients.

4.2.4 Concern about situational demands for functional health literacy

As Sticht (1978) has pointed out, practitioners create situational demands for basic literacy skills through the selection of tasks they expect their clients to perform within their various practice settings. In this section, I draw from my observational data to illustrate the various ways in which practitioners expected their clients to have a command of the written word. I also identify the extent to which practitioners appeared to take account of functional health literacy as they engaged in their breastfeeding promotion efforts. Three examples from my observations of their practice are taken from each of the three different settings: the perinatal clinic, prenatal classes, and CPNP mothers' drop-in session.

The first example takes the form of an interaction between a nurse and pregnant patient in the perinatal clinic. In the following excerpt from my observation notes, a clinic nurse/lactation consultant was completing the pre-admission counselling session with a young woman in her last trimester of her first pregnancy. As part of the pre-admission protocol, pregnant patients were expected to complete the Record of Parent Teaching Form. This procedure required them to check off topics they wanted maternity nurses to discuss during their hospital stay and to initial on the form that they have completed it themselves.

Observation example 4.1: Perinatal clinic

The perinatal nurse gives the pregnant woman the form while telling her that it is a “legally binding document”. The woman seems somewhat confused as to the purpose of the form and says, “so this is all the stuff I need help with?” The practitioner says “yes” and begins to read from the top of the list: hand washing, flow sheet, etc while describing to the woman the type of information that would likely be covered under each particular item by the hospital maternity nurse....The woman says “*do I put a line through it if I don’t need it?*” to which the nurse replies, “*leave it blank*”.... While sitting beside the woman as she works through the list, the nurse addresses items that are confusing to the woman. This woman appears to be able to read, however, she is dealing with unfamiliar terms and an unknown experience as a first time mother... The practitioner asks, “*Have you considered giving the baby colostrum*” and then explains the “*protective bodies*” it offers. The woman pauses to think about this and then asks, “*Do I have to have the baby latch on to me?*” The nurse says, “*Yes, won’t you even consider it?*” to which the woman replies, “*He’s [her husband] dead against it*”. When she finishes the form, the nurse asks her to initial it “*so that the nurses know that you completed the form, not me*”. (Observation notes, Feb 8/06 Client 4).

The above example reflects a situation in which a demand for literacy skills was placed on the client as she undertook a task requiring her to comprehend and use unfamiliar terminology in order to complete a seemingly complicated form. There was the appearance of an institutional imperative that all clients must complete the form and an assumption by the practitioner that the client had an adequate level of skill in reading and writing. I did not observe any attempt by the practitioner to

question or identify the client's ability to perform this task. As described above, this pregnant woman demonstrated many difficulties in completing the form. Not only was she unfamiliar with several words, her discomfort with the idea of breastfeeding was apparent. The practitioners' priority appeared to be on enabling the transmission of information to this client—directly during this session and later by maternity nurses after her baby was born. Although the practitioner tried to accommodate the client by reading items from the list and answering her questions as they progressed, there was no suggestion that the situational demand for literacy skills presented by this task could be altered by reconsidering the utility of the form from a functional health literacy perspective. The focus was on enabling the client to perform the task, not on adjusting the task

The second example takes place during a prenatal education class held in the PHS boardroom and led by a public health nurse. During the series of classes, videos including mothers breastfeeding their babies were occasionally shown and demonstrations given by the nurse, for example breastfeeding positioning using a doll as prop. However, I noted that information was usually presented orally by the nurse, who frequently referred to information written on a flip chart and to information in key provincial department of health publications which all participants were given. Group interaction or discussion was limited. The following excerpt is drawn from notes taken during the third evening class in a series of four in which the nurse presented information on breastfeeding to a group of 12 expectant parents and a pregnant 17 year old accompanied by her mother.

Observation example 4.2: Prenatal class

The public health nurse sits at the front of the room beside the flipchart with her Breastfeeding Basics book open in front of her. Participants also have books. She discusses each point listed on the flipchart:

Breast Feeding

- Feed baby on demand
- Should hear baby swallowing
- Alternate breast you begin with at each feeding
- More often your baby feeds the more your body produces

Baby is feeding well when:

- Feeding doesn't hurt
- You hear swallowing
- Baby's jaw muscles move on both sides
- Baby has 6-8 wet diapers in 24 hours after 3rd or 4th day
- Baby has loose yellow bowel movements, 2 or more a day.

Baby is not feeding well when:

- Hear lips smacking
- Little swallowing
- If attachment to breast hurts
- Baby jaw muscles not open wide
- Baby not content
- If baby is easily removed from breast
- Baby not gaining weight

The nurse finishes covering points on the flip chart and comments that *"The breastfeeding book has lots of really good information."* [Breastfeeding Basics, 102 page parent resource]. No interaction; no discussion. All parents just listen to the nurse or flip through pages in the book. The nurse asks if anyone has done anything over the past week re: exercises, breathing, eating. No one has. Nurse says, *"it's a lot to take in"*. (Observation notes, December 13, 2005)

In this setting, participants were expected to be able to read and understand the written word presented on the flip chart and in publications they have been given. Although I made note that information on the flip chart was in plain language, it was not apparent to me that the nurse was aware of the possibility that participants might have difficulties with reading or understanding the material presented. The practitioner's priority appeared to be on transferring facts about breastfeeding as

she referred to points listed on the flipchart and advised participants to read their book for more information. The practitioner's reliance on the written word reflected her assumption that all in the group could participate in accessing and understanding information through reading. The fact there was neither discussion nor a response to her closing question suggested the group was not well engaged.

The last example is from my observation of a CPNP mothers' drop-in session facilitated by the CPNP coordinator. In this informal setting, mothers who held and often fed their babies were sitting in comfortable chairs and sofas arranged in a circle. They were actively engaged in talking to each other, frequently about feeding issues. Each week the coordinator facilitated a short (15-30 minute) discussion or activity. The topic was usually one that participants had requested, for instance, one morning a pharmacist discussed fever management. The excerpt below is taken from a session during nutrition month as the coordinator discussed sources of reliable nutrition information by means of an activity which centred on completion of a crossword puzzle. This example illustrated a situation which assumed that participants had literacy and numeracy skills.

Observation example 4.3: CPNP mothers' drop-in session

The coordinator passes out copies of a cross word puzzle for Nutrition Month and pencils to everyone. All the mothers are holding their babies so she says *"why don't we just talk about it?"*. She goes through the puzzle questions one by one. First question is *"what is the most trusted source of information on nutrition?"* No one answers. Coordinator says *"the answer is dietitians"*. There are a few looks of surprise. She says that if they have questions that they can call the public health nutritionist and she gives them her name and number. No one writes it down. Coordinator asks the next puzzle question pertaining to recommended number of fruits and vegetables. After a few close guesses from mothers, she says *"the answer is 5-10 servings"*. One mother says *"that's a lot"*. Another mother says that *"one large banana is two servings"* and coordinator says that *"a large can of juice is three servings so it is not that*

hard to get 5-10 servings". The next question is about trans fats and the coordinator gets a box of cereal from the kitchen in order to read the label. [When this activity came to an end, the women resumed talking with each other.] (Observation notes, March 1, 2006)

In this example, the coordinator's use of a particular learning activity to stimulate discussion on nutrition created a situation in which all were assumed to have adequate literacy and numeracy skills to participate. Although the coordinator reduced the demand for literacy skills among participants by reading puzzle items, it is noteworthy that none of the mothers completed the puzzle hand-out. Although the coordinator facilitated discussion among mothers using the puzzle as a guide, her selection of this activity still created a situation where mothers were expected to have a basic level of literacy to participate.

Different health settings and situations demand different types and level of literacy skills. As illustrated by the three examples just described, basic literacy (and numeracy) skills were required for full engagement in each practice setting. In the perinatal clinic, the client was expected to complete a form which included unfamiliar terms and addressed sensitive issues. The client's discomfort with the issue of breastfeeding was noteworthy. In the prenatal classes, there was an expectation that expectant parents could read information about infant feeding from resources provided and also from the flip chart. In the family resource centre, mothers were expected to participate in a group learning activity which assumed that they could read and write answers to a crossword puzzle, estimate food portion sizes, and understand a nutrition label on a cereal box.

In each of these settings, not only did practitioners establish a requirement for literacy skills by the tasks they presented to their clients, they also appeared to take for granted that their clients had the basic literacy skills to complete the given tasks. Although practitioners' use of oral communication in addition to the printed word could be seen as a form of accommodating the functional health literacy of those with limited literacy skills, the expectation that all participants could read remained. The extent to which practitioners recognized functional health literacy as a concern in their practice was not obvious. Nor was it apparent that they were using specific strategies to enhance functional health literacy among clients who may have had difficulty accessing, understanding or using information in each practice setting. In the next section, I look at the extent to which practitioners mentioned using strategies to accommodate and/or enhance functional health literacy as they described their breastfeeding promotion practices.

4.3 Strategies to accommodate or enhance functional health literacy

My findings suggest that there are essentially two potential ways that practitioners can support functional health literacy of clients within their various practice settings. First, they can accommodate clients by adjusting the situational demands for functional health literacy skills by means of the tasks they present. Second, they can tailor their communication of information in such a way as to take into account the ability and needs of their clients. In this section, I examine whether and how practitioners, in describing their breastfeeding promotion practices, referred to modifying tasks for clients in order to reduce the situational demand for functional health literacy. I also examine whether and how their descriptions

reflected practice strategies used to enhance the functional health literacy of their clients.

4.3.1 Altering the situational demands for functional health literacy

As they talked about their practices, practitioners described situations in which clients engaged in tasks which demand literacy skills. Most frequently, they referred to these situations as opportunities to identify their client's level of functional literacy. Rarely did they mention ways in which they altered the situational demands for functional health literacy in order to accommodate their clients.

Many practitioners reported that, as part of their routine assessment processes, clients are asked to complete tasks which require reading and writing skills. One example was given by a medical specialist who pointed out that some of her patients cannot complete tasks which depend on their reading ability. She said that *"frequently I give parents questionnaires and things to do and there will be some that say I don't understand this or I cannot read it and then I have to go read it for them"* (P22, 070). Although she reported assisting her clients by reading the information once they disclosed their difficulty, there was still an initial expectation that clients are literate enough to function in this practice setting.

While in the hospital, mothers are required to record feedings and diaper changes on a form which is checked by nursing staff. This maternity nurse described the process as follows:

They always have to fill out the form because we don't feed the babies. Those babies room in and we check those forms a couple of times through

the day to make sure the baby is feeding and they are getting along OK... you can tell by that, but it is a very simple form so you could probably wing it very easily. (P28, 097)

Although she suggested that observing how a mother recorded feeding information could be used to indirectly determine a mother's reading ability, the task appeared primarily intended to meet institutional requirements for monitoring infant care.

Public health nurses reported that they routinely give child development assessment forms to mothers for completion. One public health nurse explained how she determined if mothers have difficulties with literacy by observing whether their forms are completed or not:

...we have developmental forms and we'll say would you like to fill this out or would you like me to. So if they already fill it out you know they have to be able to read to do that. ...This one family that moved in I know she wasn't able to when she asked her partner to so that's how I determined that. (P16, 089)

A CPNP coordinator described how she sometimes asked a mother during a home visit to complete part of an assessment form as a way to determine her literacy ability.

Sometimes we get them to fill out a certain part of the form that asks 'why did you come to this programme?'. We would ask them to. But I mean, really who am I to say, if they check off one or two boxes if they're actually reading that. (P7, 038)

In contrast, a public health nutritionist insisted that she tries to avoid having clients complete assessment forms. She says, "*I try not to go to the written format—like I would never ask someone 'can you read that form to me?' or focus on that sort of written format*" (P2, 71). Her comment suggested that she accommodated clients by not asking them to complete forms, thereby limiting the situational requirement for literacy placed upon them. A CPNP coordinator also

recognized the demand for literacy skills she frequently placed on mothers by means of her choice of learning activities, saying:

I'm much more conscious of how I approach even an activity... So I try to do a lot more activities instead of handing out pens and paper to them to write things. It's more oral or I might take it upon myself to read it and then the group discusses out loud together and try to get the main thoughts of it. (P4, 037)

Few examples appear in my findings of practitioners' attempting to alter tasks in order to accommodate clients who may have literacy difficulties.

In summary, although they appeared to take for granted the literacy skills of clients, some practitioners seemed aware that they were creating a demand for literacy in their practice settings. There was little mention of ways practitioners could adjust tasks to reduce this requirement. This fact has significant implications for practice as discussed in Chapter 7. Next, I take a closer look at whether and how practitioners' talk reflects efforts to enhance functional health literacy.

4.3.2 Altering practices to enhance functional health literacy

In this section, I examine the extent to which practitioners' talk reflects their use of strategies to address functional health literacy, in particular, as it relates to their descriptions of their use of print resources and their use of specialised terminology.

There is little evidence that practitioners in this study used specific strategies to ensure that the readability level of breastfeeding materials was appropriate to their clients' level of literacy. One CPNP coordinator admitted that she gave information to clients without knowing if they could read it or not. She said, "*I do give them a folder with lots of brochures and pamphlets and I really don't know if*

they can read or not ... we shouldn't do that I know" (P26, 162). Another CPNP coordinator recognized that women with limited literacy may not be able to read the pamphlets she gave them, saying, *"If she doesn't have good literacy skills, what is the good of those pamphlets and things really"* (P7, 74). A LLL leader talked about the readability of breastfeeding resources which she made available to mothers, as follows:

I don't know but certainly one of the new ones that have been brought out does have some pictograms on it... I've got some that are just pretty solid text. I mean it's broken up in headlines and stuff but it's still pretty solid text. (P5, 305)

A public health nurse suggested that even plain language materials may not be understood by those who appeared to have higher levels of literacy:

I can have a document that's SMOGs [tests for readability level] to grade six level but when the person reads it, they don't understand it... So to me when we talk about literacy, I don't see it standing on its own. (P12, 247)

Although the readability of health education materials has been the main focus of health literacy research and practice interventions reported in the literature, it is considered a necessary but not sufficient focus for practice interventions (Rudd et al. 2007).

Another public health nurse suggested that practitioners may apply alternate methods of transferring information when materials are not written at a suitable level for clients:

If I come across somebody who just could not understand any printed material or anything like that then I would have to look for something on video or you know on cassette tape or DVD, or whatever it is nowadays that people use" (P24, 406).

A LLL leader said that *"Everything is so much in print and, whether it's on tape or a CD or a video, I think it's to move to alternate format"* (P20, 078). In prenatal classes, in the perinatal clinic and during the CPNP mothers' drop-in

session, I observed practitioners using breastfeeding props, pictorial posters and DVDs to illustrate breastfeeding techniques.

A primary health nurse said that she gave breastfeeding information in an alternate format, such as by means of pictures, to clients whom she suspected may have difficulty reading:

I will just try to show them a picture that will alleviate some of their fear or give them some particular kind of information. From that, I sometimes get the sense of what level, knowing that they are not at that level, but not being sure what level they are at. (P29, 038)

However as her comment implied, she still experienced the uncertainty of not being able to easily and transparently assess the client's level of functional literacy.

These comments suggest that practitioners may recognize that print materials may not be appropriate for their clients and so turn to other means of relaying information that do not depend on clients' reading skills. It is important to point out that not only may print material not be understood by those with limited literacy skills; studies show little benefit in providing print materials alone in the promotion of breastfeeding (Couto de Oliveira, Camacho and Tedstone 2001; Palda, Guise and Wathen 2004). Given the heavy emphasis on dissemination of print information, this finding is germane to breastfeeding promotion practices within this health district. I return to this point in the next chapter as it relates to practitioners' reflections on their use of interpersonal means of communicating information about breastfeeding.

Enabling mothers to understand terms pertaining to the management of breastfeeding appeared to be of some import to many practitioners. For example, a public health nurse said:

We would like the prenats to be clear about these terms so that when their baby arrives and they are having their first breastfeeding experience, they know what the expectations are around getting started that allows them to have a successful first experience and reduces the risk of nipple trouble and so on” (P9, 56).

A rural public health nurse reported giving a glossary of breastfeeding terms to her pregnant clients—a strategy which, of course, may not be effective in enhancing functional health literacy if basic reading skills are limited. This approach implies that clients are expected to adapt to the terminology rather expecting practitioners to accommodate clients by using clearer language.

However, several practitioners talked about simplifying the language they used in describing lactation. For instance, one public health nurse said, “*the let-down, areola, hind milk, you know we talk about the baby getting hind milk so you have to break it down into simple understandable language so that people can understand it*” (P21, 152). Another public health nurse spoke about how she explained breastfeeding terms in clear language:

The areola, if you said that they would look at you, but if you say the brown part of the breast, they would know. They pretty much know what latch is, they know. I think they know a lot. We hope [laughs]. (P24, 122)

While her comment suggests that she tried to avoid specialised terminology, there is a general assumption that certain terms—such as “latch”—are well recognized and understood by clients. However, other practitioners claimed that even terms like “latch” may be unfamiliar to women as it pertains to breastfeeding. A family physician, for example, said that he explained terms even like “latch”.

Some physicians and people self elevate themselves but I'm not really one of those people. I tend to talk on a level that I hope you can understand ... if I talk about 'latch' I will end up explaining it myself. (P18, 85)

In this comment, there is recognition that health professionals' use of professional jargon can create social distance and power differences between women and their health practitioners. Although there was little mention of power relations during the interviews, considerable attention was paid to practitioners' relationships with their clients and their perceptions of expert advice related to breastfeeding. The importance informants placed on the practitioner-client relationship is explored further in the next chapter.

Whereas there was some indication in their talk of an attempt to accommodate clients who may have literacy difficulties within practitioners' description of their practices, there was little sense of practitioners' confidence in applying strategies to enhance functional health literacy. One CPNP coordinator admitted that she, like other practitioners, did not pay much attention to basic literacy skills when providing information and services to the clients. She said, "*A lot of people don't think about it, including myself, don't think about it enough; I think we need to be educated on how to go about finding out*" (P26, 174). Her suggestion that practitioners need more education on how to address literacy in their practice mirrors reports in the literature and foreshadows implications for practice as discussed in Chapter 7.

In summary, few clear strategies for how practitioners can enhance and /or accommodate functional health literacy emerged from my examination of practitioners' descriptions of their breastfeeding promotion practices. Examples

given tended to be more reflective of practitioners' efforts to make accommodations for clients with literacy difficulties, rather than to enhance the functional health literacy of clients. As discussed next, further examination of the extent to which practitioners' talk reflects aspects of functional health literacy revealed a number of tensions and barriers.

4.4 Tensions and barriers in addressing functional health literacy in practice

Throughout this chapter, there has been an undertone of discomfort and hesitancy within practitioners' talk. I now focus on three areas where these tensions are most pronounced. The first regards difficulties practitioners encountered or anticipated encountering in identifying clients with low literacy. The second concerns reaching women in their communities who may not be able to access breastfeeding information and services because of limited literacy. The third is their lack of perception of a clear link between breastfeeding and functional health literacy.

4.4.1 Identifying low literacy as a barrier to functional health literacy

There is recognition in the practitioners' talk that the stigma and feeling of shame associated with low literacy may discourage some women from accessing information. Their comments reflected a sense of discomfort in considering the possibility that clients may lack basic literacy skills needed to function in their practice setting. In particular, they expressed concerns about determining whether and if clients experience low literacy. Many of their comments reflected anticipated problems but there were few descriptions of specific incidences where they encountered a client who had literacy difficulties.

Several practitioners suggested that women with low literacy may be limited in their access to information about breastfeeding. For example, a public health nurse noted that women with low literacy skills are often uncomfortable attending prenatal classes. She said, *“I mean it can be pretty intimidating for somebody who is pregnant and in some way either economically or socially marginalized to come into a room where everybody else is functionally literate and fits in”* (P21, 116). In a similar vein, a maternity nurse suggested that low literacy limits women’s access to information largely because of their lack of confidence in not being able to read:

I think they would lose a lot of chances of getting information. People are usually embarrassed if they can’t read or understand things so they are not going to let on maybe so they just wing it through whatever life skills they have now, so they may not let on. (P28, 077)

Many practitioners suggested that individuals concealed their literacy difficulties and those clients can be reluctant to reveal that it is impeding them from accessing and understanding health information. According to a perinatal nurse, women were most likely to disclose literacy problems when they attended the perinatal clinic for pre-admission assessment, saying it is, *“especially prevalent when they come around 36-37 weeks for their pre-admission. That is when a lot of times they will own up. ‘You know I am sorry I cannot read that or I don’t understand that.’”* (P3, 115). Her comment suggested that clients reveal or “own up” to their literacy difficulties only when they encountered pre-assessment forms and reading materials.

As they talked about their practices, practitioners reflected their discomfort in identifying whether or not their clients had low literacy skills. According to one

maternity nurse, little attention has been directed by practitioners to identifying if low literacy is, in fact, a barrier to health communication among their clients:

We make a great assumption that everyone understands what it is that we're giving them and we don't have or we don't use any type of good questions or screening to discover literacy levels of people. We just assume that everybody can read that pamphlet that we hand them—which knowing the literacy levels of the community, we know not to be true. (P1, 112)

Not only does this comment imply that low literacy may indeed be a concern within this health district's population, it again suggests that practitioners were likely to take for granted that their clients have adequate literacy to function in their practice setting. Hence, they tended to overlook those who have difficulties with functional health literacy.

While some practitioners suggested asking clients directly if they can read and write, most practitioners are uncomfortable with this approach. Another maternity nurse recognized that low literacy is a likely problem among women receiving perinatal services and information within this district, but she struggled with offering ways in which practitioners can identify clients with low literacy:

You could look at it and see and maybe you could pinpoint some of these mothers, I don't know how and how you could do it delicately and find out from them their best way of learning. Do the doctors know or does somebody know? Does somebody pick up on these people? (P28, 460)

A rural CPNP coordinator said “*I wouldn't want to just go into somebody's home and say 'I don't think they have good literacy so I better ask'”* (P7, 399). A family practice nurse reported that because asking directly about literacy may not be effective, she turned to the more subtle means of observing a patient's response when presented with print information:

We sometimes do ask the question, but they don't always tell you. But I find if we are working on something together, cause sometimes I will take

out a piece of information, look at some books on breastfeeding for example... if they are having difficulty or whatever, I can sort of tell where their level is because these are medically written books. (P29,034)

One public health nurse reported that while she sent pregnant women assessment forms to complete and brochures to read, she did not know how to determine if they were able to read and understand them. As she said,

So we have a prenatal needs assessment that we forward and part of it is 'How are you planning to feed your baby'?... And then they get a package of information, Healthy Beginnings information and again it is all written. I don't ask, and I don't know how to ask it. I don't know what I would say... 'If I sent you a book, could you read it and understand?' I don't know if anybody asks that? (P15, 045)

Practitioners were not likely to report asking about their clients' ability to read. A family physician admitted that he paid little attention to identifying patients who may have literacy difficulties. However, he speculated that all his patients may be literate.

Whether I spend enough time saying is this mom going to have difficulties because she can't read or can't access the information, I probably don't. Probably like a lot of other people that's something that I'm not working on. For right or for wrong, maybe the patient load that I have is OK [literate]. (P18, 069)

Another family physician acknowledged the difficulty in identifying those clients with literacy difficulties and, furthermore, suggested that identifying clients' literacy level of clients was not the physician's responsibility:

It would be difficult I think to select out those people that are having problems... I don't think we would be able to get everybody, unless we formally, you know, took a history about it or something... Well I mean there is some things on the prenatal form but and I don't formally go through them... But there has never been something like that that's been part of my job I should say and it may be that it could be part of somebody else's job like the perinatal clinics or something like that. (P19, 211)

A medical specialist wondered whether or not literacy level issues were addressed by staff in the perinatal clinic—the setting where pregnant women are provided with information on a range of issues including infant feeding:

I don't think that we do that up in the perinatal clinic. I don't think we address that question either because it's a hard question. But it doesn't mean we shouldn't. I think we need to get the information but we need to think really carefully about how we can do it without really making it a bad experience. (P27, 169)

Although this medical practitioner suggested there may be a need to ask about literacy, her comment reflects her concern about the sensitivity of addressing the issue with patients.

A hospital maternity nurse attributed the difficulties practitioners have in recognizing clients with low literacy to clients' deliberate efforts to conceal it. She says, *"I just think that personally that people who have literacy problems hide it"* (P28, 125). Later she said, *"How you find out how illiterate someone is or not is sometimes hard because if people have gotten through this part of their life they were able to fool people or get around things certain ways"* (P28, 436). A public health nurse suggested that women may be unwilling to draw attention to themselves because of their limited literacy and because of their breastfeeding experience—both of which she linked to low self esteem, as follows:

If you have low self-esteem already from not being able to read and no one knows that you can't read. You're trying to keep it hidden. Sometimes breastfeeding, it is going to cause people to pay more attention to you. They just automatically do. Maybe you want to stay hidden; you don't want people looking at you. (P26, 382)

Her comment speaks to the social stigma attached both to low literacy and to breastfeeding in some communities. One CPNP practitioner referred to her experience working with rural women who may not easily disclose their literacy difficulties:

You don't want to let them think that because they can't read or a poor reader, that they're any less of a person or that you don't want to help them. Actually you want to help them more but to get that point across,

it's a touchy thing because a lot of people if they have literacy problems, they're not open about it. (P7, 46)

Her follow-up comment explicitly addressed the stigma associated with low literacy, “*Well I think it's because society looks at you as if you can't read or write that you're a lower standard of person than others*” (P7, 50). A maternity nurse summed up the discomfort and uncertainty that practitioners experienced in confronting the issue of literacy in their practice, “*I think we are uncomfortable with it but it would be optimal if we could address it but I don't know how you would*” (P28, 464).

In summary, the stigma and shame associated with low literacy is a source of considerable discomfort as practitioners talked about their breastfeeding practices. This discomfort is consistent with a deficit perspective of literacy reflective of traditional approaches to functional health literacy. Findings are consistent with reports in the literature that low literacy is stigmatizing and that health practitioners have difficulty identifying and addressing low literacy in their interactions with clients (see section 2.2.5, p.55). Next, I look at tensions underpinning practitioners' description of their practices aimed at promoting breastfeeding to marginalized women.

4.4.2 Promoting breastfeeding to marginalized women

Inadequate literacy skills often exclude people from accessing information, programmes, and services available to people with higher levels of literacy and education (Rootman and Gordon-El-Bihbety 2008). Some practitioners described the difficulty reaching women in marginalized groups—women who are least likely to breastfeed and most likely to have a low level of literacy.

As they described their efforts to promote breastfeeding, practitioners did not appear to have a clear idea of what groups of women within the district were most likely to experience low functional health literacy. A medical specialist with years of experience in providing perinatal care for women throughout the district contended that, *“In our region, this is the young uneducated group that are by and large the women who are getting pregnant...So it [literacy] is a crucial issue”* (P27, 253). She referred to literacy difficulties among First Nations women, in particular, saying, *“I think literacy’s a big problem in that group”* (P27, 037). One maternity nurse said, *“I still think that some of your more illiterate people—maybe in your rural areas—are harder to reach”* (P28, 305). However, a comment from a public health nurse suggested that she was not convinced that literacy was a problem in her rural area. As she put it, *“Define low literacy—I have a hard time with that one because people will tell me that the literacy rates in [name of county] are low and I go and I think not many of our kids don’t finish high school”* (P12, 97).

It is not surprising that practitioners have various views on what population groups are most likely to be vulnerable to low levels of literacy. At the time of this study, data on literacy levels of the population in the district were not available. However since then, analyses of international survey data and GIS mapping of population distribution of both literacy and health literacy levels have become available. These show differences among communities within health districts (CCL 2008). Access to this information by practitioners could be used for identifying vulnerable population groups and developing health literacy appropriate strategies to reach them.

Several practitioners acknowledged their difficulty in reaching women for whom low literacy may be a barrier to accessing breastfeeding information and services. They raised a number of challenges in reaching marginalized women. For example, one medical specialist suggested that practitioners' lack of time is a barrier:

So the challenge for the health care practitioners is that for the population we are looking at, you really have to go out and teach them, you cannot give them pamphlets and say that we need to fix this and that requires a lot of time and it is time we are short on. (P22, 146)

A public health nurse also referred to the time and trouble practitioners have contacting some women.

Oftentimes the moms who need that information we'll have to seek out. You know we will get the referrals from the perinatal clinic and often times spend a lot of time trying. By the time the perinatal referral gets to us the phone number has been disconnected or they have moved... (P21, 097)

Another public health nurse observed that women limited in literacy are unlikely to participate in prenatal education sessions. She said, *"It's so hard when you do classes or do whatever, education sessions, to get people to them and it's often the people maybe possibly with low literacy that aren't there that you want to get there."* (P16, 417)

According to a CPNP coordinator, few women from a neighbouring socio-economically disadvantaged African Nova Scotia community participated in her programme. She said. *"I do know of one woman, two in the Black community, that we have had breastfeed that I am aware of that have been in the programme, but like I said we don't get a whole lot in the programme anyway"* (P26, 594). It

is noteworthy that practitioners made no explicit mention of the interlocking factors of race, class and gender as it relates either to literacy or to breastfeeding.

One CPNP peer leader suggested that women who are limited in literacy may be reluctant to attend group sessions at the family resource centre for fear of revealing their literacy difficulties to others. She said that “*some people don’t want to come and admit to the fact that their understanding or literacy levels are low*” (P8, 525). Her comment suggests that the shame associated with low literacy is oppressive in that it keeps women from accessing the information and social support offered through programmes intended to serve them. In her opinion, those with less literacy are more likely to bottle feed and less likely to be reached with breastfeeding information. She explained:

We are missing people. Getting all these people that have the higher education and they have the ability to choose, the ability to make an informed decision on their own maybe or with the help of the people, the doctors and prenatal classes and stuff. I am not sure if the people that have the lower literacy levels if their assumption is that formula is the way to go. (P8, 537)

This CPNP peer leader went on to suggest that mothers who bottle feed may not come to the family resource centre because of the emphasis on breastfeeding and, consequently, they do not gain access to breastfeeding and other information for future use. She said:

The main focus when they (mothers with less literacy who decide to bottle feed) come is about breastfeeding so it would be hard and maybe that would keep them from coming here and accessing information for their next pregnancy. They could try to breastfeed and maybe they don’t come because they don’t feel comfortable or welcomed or whatever. (P8, 460)

It is ironic that programmes promoting breastfeeding may actually prevent women with less literacy from accessing breastfeeding information and reduce support.

In summary, strikingly little was said by practitioners about specific strategies used to tailor information and programmes to reach groups of women most likely to experience low literacy as a barrier to accessing breastfeeding information or services. Next, I look at the uncertainties about the links between breastfeeding promotion and functional health literacy reflected in practitioners' talk.

4.4.3 Lack of a clear link between breastfeeding and functional health literacy

Findings suggest that practitioners' lack of awareness of a clear link between breastfeeding and the functional health literacy of their clients may be a barrier to incorporating notions of functional health literacy into their breastfeeding promotion practice. There was ambivalence in practitioners' talk regarding the extent to which promoting breastfeeding is dependent upon improving client's functional health literacy. On one hand, literacy skills were mentioned as key to enabling women to access and understand information about breastfeeding. On the other hand, practitioners suggested that women can become informed about breastfeeding through various means. Hence, lack of certainty about how enhancing functional health literacy relates to their breastfeeding promotion practices appeared as yet another source of tension.

Several practitioners claimed that breastfeeding is not intuitive, but rather a learned practice and, as such, required access to appropriate information and ongoing support to be sustained. A family practice nurse said, *"I don't think we are born knowing how to breastfeed. I think it is an art in itself and if you don't have the information, you will breastfeed but you may struggle through it"* (P29, 114). One maternity nurse suggested that all women— regardless of level of their

literacy—needed access to information if they were going to breastfeed: “*Well to enable breastfeeding we absolutely need to have more information accessible by [people from] all walks of life, whatever way, if it is one on one or group teaching, whatever it takes*” (P28, 436). These comments imply that successful breastfeeding is, in large part, dependent on being able to access information.

Some suggested that low literacy may limit women from being aware of the benefits of breastfeeding. One public health nurse said that “*being in a low literacy level usually means that they haven’t gone on to a further education where they would be educated or informed about the benefits [of breastfeeding]*” (P16, 257). This focus on how a lack of literacy skills impeded one’s ability to be informed about breastfeeding is consistent with a deficit approach to health literacy. However other practitioners suggested that low literacy does not necessarily preclude one from being aware of the benefits of breastfeeding. A CPNP coordinator said, “*I think if you can change the perception of breastfeeding in the whole, I don’t think it really matters if the person is literate or not*” (P7, 534). Her comment implies that breastfeeding promotion efforts should not only focus on the individual with limited literacy but on wider public acceptance of the benefits of breastfeeding—a stance more consistent with a public health approach and capacity building approach explored further in the next two chapters.

A medical specialist claimed that breastfeeding is not dependent on being able to read. She suggested that because information on breastfeeding was relayed to women in the perinatal clinic through oral means, reading skills were not needed:

But I’m not sure that with breastfeeding that it’s so dependant on one’s literacy. I think that we talk with them, that’s not so important but then

(name of perinatal coordinator/lactation consultant) will spend at least an hour with these people and I don't think she's relying so much on anything written. Sure she'll give them the (print) information, but I think it's more what she says than what she gives them that has an impact. (P27,089)

A primary health care nurse contended that women with limited literacy can get the information they needed to breastfeed despite having a low literacy level:

If you are looking at literacy— the ability to read— women are still going to, if they want to breastfeed, whether they have a high education or not, they are going to get the help they need to breastfeed. If they are lower social economic, it is cheaper to breastfeed. They may absolutely have to breast feed because they cannot afford formula. They are going to get the help; they are going to succeed at it if they want to. (P23, 451)

This comment asserts that regardless of literacy level, acquiring the information needed to support breastfeeding is within any mother's capability.

In summary, there appeared to be a recognition among practitioners in this study that while low literacy can limit women's access to information about breastfeeding, women can learn about breastfeeding through various means, not only those dependent on the written word. Thus, it is not clear how enhancing women's functional health literacy relates to practitioners' efforts to increase initiation and duration rates of breastfeeding—the central aim of their practice.

4.5 Summary and conclusion

Practitioners' talk did not reflect a universal or shared understanding of literacy, or functional health literacy. Although descriptions of their practices reflected various notions of functional health literacy, the extent to which functional health literacy was recognized as relevant to their practice is not clear. For example, there was no common view on:

- determining if materials are written at an appropriate level of readability

- knowing if clients understand terms used in talking about breastfeeding
- recognizing when a lack of literacy skills prevents clients from engaging in situational tasks such as completing forms and reading materials in practice settings
- confronting the stigma of low literacy in their interactions with clients
- identifying clients with low literacy skills
- enabling marginalized women to access information and services supporting breastfeeding, or
- knowing how literacy level affects breastfeeding initiation and duration.

Given the sense of uncertainty and discomfort in their talk, it is not surprising that few strategies were suggested for enhancing and /or accommodating functional health literacy within their breastfeeding promotion practice. Reports of practices which reflected incorporation of aspects of functional health literacy tended to focus on the accommodation, not the enhancement, of functional health literacy. It is apparent from findings presented in this chapter that practitioners in this study did not seem to engage easily with the notion of basic literacy—and by extension functional health literacy—within the context of their breastfeeding promotion practices. In the next two chapters, I explore findings which reflected their incorporation of alternative ways of approaching health literacy within their practice.

Chapter 5

Reflections of interactive and critical health literacy in practice

5.1 Introduction

In this chapter I look at whether and how practitioners' descriptions of their breastfeeding promotion practices and those I observed reflected the incorporation of notions of interactive health literacy and critical health literacy. These two dimensions of health literacy are central to Nutbeam's (2000) model of health literacy, which he derived from a three-part typology of literacy composed of functional, interactive and critical literacy (see section 2.2.3.1, p.34). As a platform for this examination, I begin by outlining key features of Nutbeam's approach to interactive and critical health literacy.

Nutbeam argued for a shift from traditional health education practice, which he considered more in keeping with functional health literacy, to practices which can enhance interactive health literacy and, thereby, improve personal capacity to act independently on knowledge. In addition, he suggested that practices which enhance critical health literacy can improve individual resilience to adversity and community capacity to address social determinants of health⁴⁶. Nutbeam drew from the fields of literacy, adult education and health promotion in developing his health literacy model. He described key features of health literacy⁴⁷ in the following way:

- Focus on the life experience and knowledge that adults bring to the learning situation (capacity not deficit approach)

⁴⁶ Determinants of health refer to the range of personal, social, economic and environmental factors which determine the health status of individuals or populations (Nutbeam 1998).

⁴⁷ Nutbeam cites Imel (1998) for adult education principles consistent with interactive health literacy (Nutbeam 2008a).

- Recognition of how important the context of a learner's life is (contextualized learning)
- Respect for personal autonomy and self-directed learning (empowerment approach)

Nutbeam claimed that “improved health literacy is critical to empowerment” (Nutbeam 2000, p. 259) and implied that empowerment is central to both interactive and critical health literacy. In addition, he suggested that personal empowerment can be achieved by improving one's personal capacity to access and use information effectively; whereas, in describing critical health literacy, he said that information can be used to “to exert control over life events and situations” (2000, p.264). His idea of critical health literacy is built upon an emancipatory approach to empowerment with efforts directed not only to individual action but also to social and political action in addressing social determinants of health. In line with the breadth of the WHO definition of health literacy (Nutbeam 1998), his ideas of interactive and critical health literacy call for ways of practice which invite interaction, participation and critical analysis—processes characteristic of a Freirean approach to adult literacy (Nutbeam, 2000; Freire 1973).

Nutbeam's health literacy model has been welcomed by many in the fields of public health and health promotion. Its acceptance has largely been because it extends beyond a focus on information transmission which is characteristic of functional health literacy and has most commonly been applied within medical/clinical settings. Although Nutbeam's concepts of interactive and critical health literacy have been referred to widely in the literature, there are few reports of efforts to operationalize them. In his writing, Nutbeam offered few specifics

for reshaping practices in ways that value experiential knowledge, contextualize learning, and support independent thought and action. While acknowledging that incorporation of health promotion and adult education principles was generally lacking in health literacy initiatives, he called for practitioners to focus less on information transfer and more on applying his concepts of interactive and critical health literacy (Nutbeam 2008a).

Nutbeam has suggested that, taken together, the three levels of functional, interactive and critical health literacy can contribute “to improve people’s capacity to make healthy choices” (Nutbeam 1999, p.53) and that they “progressively allow for greater autonomy in decision making and personal empowerment, demonstrated through the actions of individuals and communities “ (Renkert and Nutbeam 2001, p. 382). Although Nutbeam described functional health literacy as foundational in allowing people to access and understand information, he urged practitioners to become more engaged in practices directed at enhancing interactive and critical health literacy, thereby developing their clients’ capacity to act independently on information provided. Underlying Nutbeam’s notion of enhancing interactive and critical health literacy, however, is a fundamental health promotion dilemma pertaining to the interrelated concepts of capacity building and empowerment.

The key problem is that enhancing capacity for independent action can result in informed individuals who then assert their independence in ways which do not adhere to what health practitioners recommend as healthy choices. While they may espouse the notion of enabling an informed and free choice among their

clients, practitioners are likely to find it difficult to operationalize Nutbeam's notions of interactive and critical health literacy without confronting this fundamental problem. These concerns came to the foreground in this study as practitioners identified difficulties in providing information to women so that they could make an informed choice on how to feed their babies.

My central aim in this chapter is to examine whether and how practitioners' descriptions of their breastfeeding promotion practices and observed practices reflect Nutbeam's suggestions for enhancing interactive and critical health literacy; the extent to which their talk reflects their recognition and identification of ways to advance interactive and critical health literacy; and lastly, what tensions and dilemmas related to interactive and critical health literacy arise throughout their talk.

5.2 Extent to which practices reflect Nutbeam's approach to health literacy

In examining the extent to which practitioners' descriptions of their breastfeeding promotion practices and observed practices reflect Nutbeam's suggestions for advancing health literacy, I first look at the extent to which their reported practices focus on information transmission. I then compare how their reported efforts in enabling women to make an informed choice on infant feeding are in keeping with Nutbeam's suggestions for enhancing interactive and critical health literacy.

5.2.1 Extent of focus on information transmission in promoting breastfeeding

Nutbeam suggested that practitioners should move away from an emphasis on transmitting information to clients towards enabling them to develop the personal

and social skills they need to act on information. He recommended greater use of interpersonal means of communication and less use of means requiring basic literacy skills. Practitioners' descriptions reflected a preference for interpersonal communication in promoting breastfeeding. However, examination of practitioners' reports of their practices and my observation of their practices in selected settings suggests that while they often use non-written means of communication to transfer information, this does not necessarily involve engaging clients in more interactive communication about breastfeeding.

As noted in Chapter 3 (see section 3.4.2.1, p. 117), breastfeeding is promoted in this study site within the context of a highly organized system aimed at delivering information and services across a continuum of practitioners in medical and community settings. As one nurse manager described it, at the centre of this system is the perinatal clinic that was created as a way to address the district's low rates of breastfeeding:

So we started to look at what could we do to enhance those rates (breastfeeding) and that's when the perinatal clinic was developed. ... Part of what we would be doing in that clinic is making sure that all mothers and families had information about breastfeeding and encouraging them to move in that direction. (P1, 037)

During my observation at this perinatal clinic, I was particularly struck by the amount and variety of information directed to clients. Breastfeeding information, both print materials and oral communication, was part of the delivery of a vast array of information pertaining to perinatal and infant care issues. The following example of an interaction between the perinatal clinic nurse and a 20 year old pregnant client with her partner illustrated the practitioner's commitment to delivering information about breastfeeding.

Observation example 5.1: Perinatal clinic

Nurse asks, *"how will you feed the baby?"*. Client quickly replies *"bottle feed"*. Nurse asks *"would you consider breastfeeding?"* and client quickly says *"no"*. Nurse asks *"can I ask you why?"* and client says because *"I am not comfortable with it"*. Nurse says *"breastfeeding is the gold standard."* Client says *"you can tell how much they are getting with the bottle... If breastfeeding, you don't know how much they are getting"*. ...Nurse says *"do you mind if I give you the spiel?"* Client says *"it's not going to work"*. Nurse says *"as a professional I am expected to tell you about breastfeeding but the decision is yours"*. Nurse takes a baby doll and describes and shows her how to position it properly to the breast. She then uses a breast prop to describe and demonstrate the latch and says *"It shouldn't hurt"*. The nurse continues to provide information to the young woman and her boyfriend about colostrum and transition to various types of milk, stimulation of hormones to produce milk and milk production....The nurse moves from one topic to another addressing dietary needs of breastfeeding mothers, stooling patterns of breastfed babies, positioning a baby in a crib, dangers of smoking around the baby, care of newborns, car seats, and a number of other issues including what to expect in the hospital. (Observation notes, February 8/06, Client 1)

In this situation, the practitioner's emphasis was clearly on transmitting breastfeeding information. Although the nurse asked questions of the client, there was little time for engagement in dialogue with the client. Despite the client's assertion that she was not interested in breastfeeding, the nurse appeared compelled to provide breastfeeding information. This example also reflected the pressure the nurse was under to provide information on an array of infant care issues within the time constraints of the scheduled appointment.

During my observation of two series of classes presented by public health nurses, I again observed that breastfeeding information was covered among many prenatal and infant care topics. Although there were general guidelines, classes differed in structure and content depending on the public health nurse. The next excerpt from observation of one class illustrated the nurse's attempt to engage class participation while relaying breastfeeding information to them.

Observation example 5.2: Prenatal class

Standing beside a flip chart with a page partially taped up, the nurse begins this evening's discussion by asking, *'What do you know about breastfeeding?'* After no response, she goes on to ask *'What are the advantages?'* and participants respond with *'immune bodies, nothing better, cheaper'*. She then turns the flip chart sheet down and presents her list of benefits: *'easily digested, less illness, decreases viral and bacteria infections, decreased allergic reactions, right temperature, promotes involution of uterus, encourages mom to relax, and cost'*. Next she asks *'Why wouldn't you breastfeed?'* Participants respond: *'not comfortable, hurts, lots to learn'*...The public health nurse tells them that exclusive breastfeeding until 6 months is the current recommendation and then discusses ways of overcoming what they see as disadvantages... She quickly moves on to other topics. After the class she tells me that she always prepares for her classes so she can cover a large amount of material, while facilitating participant interaction. She admits that it is impossible to cover all the material she should. (Observation notes, January 16/06 Class #3)

In this example, the nurse appeared committed to relaying a large amount of information, and at the same time she posed questions to engage the participants in discussion. In their study of prenatal education, Renkert and Nutbeam (2001) claimed that prenatal educators cannot possibly cover all of the current information parents may need or want to know about childbirth and infant care. Although they suggested that prenatal educators should focus less on information transmission and use more interactive communication approaches directed to enabling maternal skill development, they concluded that prenatal education was rarely grounded in adult education principles, i.e. ways which respect the experience and knowledge of learners and the context of their lives.

One public health nutritionist whom I interviewed suggested that information transfer dominates prenatal education and she bluntly called for a change in practice:

I think that even if in the prenatal classes, just changing that whole form, like look at those prenatal classes for example, with the health literacy

perspective or the social support perspective instead of let's just get them there and give them the information they know and send them off. (P2, 55).

Her comment is in agreement with the suggestion made by Renkert and Nutbeam that prenatal education practices need to focus less on information transmission and more on maternal skill development and empowerment.

My third example comes from my observation of practices at weekly CPNP mother's drop-in sessions at a family resource centre. Like the other settings, mothers coming to the centre were exposed to abundant information. Shelves of books, posters on the walls, pamphlets and videos were displayed and easily accessible. There were also information sessions led by the coordinator or invited resource people from the community. Mothers suggested topics they wanted discussed. For example, a pharmacist talked with them about infant fever management during one morning's session. In contrast to the previous two examples, in this setting I observed practices which had less focus on directing information to clients and more evidence of facilitating interactive communication. Mothers were actively engaged in talking with the coordinator, resource people, and each other about common concerns such as feeding their babies.

I observed practices—especially those of the CPNP coordinator—which were consistent with Nutbeam's emphasis on valuing experiential knowledge, understanding the context in which health decisions are made, and respecting independent thought and action. The following example of an interaction between the CPNP coordinator and a mother illustrates the coordinator's respect for the mother's experiential knowledge regarding how best to feed her baby.

Observation example 5.3: Mother's drop-in session

A first time mother with her 4 month old baby arrives early one morning and immediately begins discussing a breastfeeding concern with the coordinator. She talks about how both grandmothers are telling her that she is '*starving her baby*' by exclusively breastfeeding her. The coordinator reassures her that the mother knows best what her baby needs and agrees that it is difficult dealing with such opinions from others. At the end of their discussion, she invites the mother to an upcoming focus group with practitioners to discuss factors influencing duration of breastfeeding saying, "*you will have lots to offer practitioners because you are going through this experience right now*". (Observation notes February 15/06, Session #1, p.1-2).

In this case, the coordinator did not direct information to the mother, but rather affirmed what she was doing—which happened to be consistent with the advice given related to breastfeeding duration. Furthermore, the practitioner encouraged the mother to share her experiential knowledge with a group of practitioners, in particular with respect to resisting the grandmothers' advice. In describing her role, the coordinator said, "*My role here is more supportive than giving out medical advice*" (P4, 214). She talked about how she tried to foster a supportive environment for mothers where their strengths, not deficiencies, were reinforced.

But you know with moms, we're constantly feeling guilty if something doesn't go right. We blame ourselves all the time, so I think just working on this person's strengths would help her a lot... yesterday for instance a woman was going by the sign and she read the information on the wall and she said, 'oh god there's something else I do wrong'. It was like wait now, look at all the positive things that you do right. (P4, 543)

In this case, the coordinator appeared to respond to a mother's concern in a way that was intended to strengthen her confidence in her mothering role. In reflecting upon this approach the coordinator said, "*That's all about health literacy that they feel free to express that and to get other input from other moms and other people and the staff too*" (P4, 555). She also encouraged mothers to share information about breastfeeding, saying, "*Lots of women are very very keen to share their experiences or to help out another mom with breastfeeding*" (P4, 218).

Mothers talked about the value of their interactions in this setting during a focus group interview held with mothers at the centre. One mother said, *“You just have questions about it whether or not something is typical or not. The information is there but it is nice to be able to talk to somebody here or other mothers.”*

(Mothers’ focus group #2 October 2005, p.5). Another mother talked about her experience connecting with a mother at the family resource centre

I talked to a mom here about 3 weeks ago here at Kids First [family resource centre] carrying twins and she said, ‘I got more out of our 20-minute talk than I have in the last 7 months of my pregnancy with doctors.’ It was just amazing and we found out that we had so many similarities.
(Mothers’ focus group #2 October 2005, p.6)

These comments reflect the encouragement mothers were given to draw upon their experiential knowledge. Some compared the support for breastfeeding at the family resource centre with what they received from their physicians. They claimed they looked to their family physicians when they had a problem, not for breastfeeding support. As one said, *“You got a problem I [the doctor] will fix it or send you on.’ But with breastfeeding itself you may not have any problems but it itself needs support; it is not something you can do in isolation.”* (Mothers’ focus group #2 October 2005, p.6)

Creating an environment that supports opportunities for interactive communication and sharing experiential knowledge is consistent with Nutbeam’s notion of enhancing interactive health literacy. Creating such an environment, however, is likely less problematic for practitioners when all women are breastfeeding. As I pointed out in the last chapter (see section 4.4.2, p.201), an environment known to support breastfeeding may, in fact, unintentionally exclude women who are not inclined to breastfeed.

Not only did mothers who participated in the drop-in sessions report supporting and learning from each other, they also suggested that they were encouraged to become more independent in tapping relevant sources of information when they had a concern. As one mother put it:

I know I called here (family resource centre) a couple of times and I called public health a couple of times and I asked or I called (name of friend). Sometimes it is just as easy to pick up the phone and call a friend and ask them. (Mothers' Focus Group #2 October 2005, p.18)

Practices which enable mothers to become more self-sufficient in accessing information is in keeping with Nutbeam's call for a shift away from transmitting information to clients towards enabling them to develop skills including "knowing where to go for further information" (Renkert and Nutbeam 2001, p.381). The ability to apply health literacy skills in new situations as issues arise is consistent with the notion of the generativity of health literacy proposed by Zarcadoolas, Pleasant and Greer (2006) and discussed further in the next chapter.

In summary, practices reported and observed in the perinatal clinic and prenatal education class setting appeared to give priority to the transfer of information to clients. Those practices in the CPNP setting at the family resource seemed more in keeping with Nutbeam's call for less focus on information transfer and more on engaging individuals in sharing experiential knowledge, contextualizing learning and encouraging independent thought and action. The more informal setting of the family resource centre, located outside the traditional health care environment, was more conducive to facilitating interactive communication among mothers and practitioners. Next, I look at the extent to which practitioners' emphasis on

enabling women to make an informed choice reflects Nutbeam's suggestions for interactive and critical health literacy.

5.2.2 Breastfeeding promotion and enabling an informed choice

The idea of informed choice appeared well established in practitioners' talk about their breastfeeding promotion practices. The emphasis placed on informed choice in their description of practices was not surprising given the predominant place the concept of informed choice has in Canadian discourse related to the promotion of breastfeeding (Knaak 2006). Practitioners frequently professed to be guided in their practice by scientific evidence—evidence derived from a substantive body of research supporting the benefits of breastfeeding particularly with respect to infant health. There appeared to be an assumption underpinning their provision of infant feeding information that if women are informed of this evidence, they will make a rational decision on how to feed their babies and, further, that their choices will be to breastfeed. This assumption suggested that there is one way of knowing about breastfeeding—one that depends on factual and scientifically derived knowledge. This is looked at in more depth in Chapter 6 as the multiple literacy domains of health literacy are examined.

The tendency for practitioners to assume that an informed choice means the choice to breastfeed was most explicitly stated by informants who attended a practitioners' focus group. As one participant said,

If we evaluated our interventions and we found that we are doing a phenomenal job on the literature or the teaching resources that we are getting to parents, we have found a way in our fantasy world that they are capable of understanding every bit of information and all of the evidence that is there so that they can make their informed choice. Because that is what we want them to do, make an informed choice. We are anticipating

that when they get to that level, the informed choice that they are going to make is breastfeeding. (Practitioner Focus Group 2, p.7)

Some practitioners talked about providing evidence-based information to ‘empower’ mothers to make their own decisions about infant feeding. One primary health nurse, for example, referred to the empowerment of women as central to her role as a health practitioner:

Empowering women to be able to make their own decisions and know what it is they need in terms of feeding their own children. And supporting that, and providing them with the evidence though because I think, in all fairness, women might be blinded if they don't have the appropriate information around what is the evidence around feeding your children. (P29, 266)

Although enabling mothers to make their own decision was highlighted, the idea that women may be “blinded” or unaware of current evidence-based recommendations suggests that some women may be quite dependent on practitioners for information on how to feed their babies. This same nurse continued by confirming the importance of providing women with information, “So our messaging is extremely important in terms of promoting it [breastfeeding], in terms of supporting women individually who have a choice to be made” (P29, 274).

Whereas some practitioners advocated empowering women by enabling them to make a choice based on the information provided, others took a more directive approach to their provision of breastfeeding information—an approach challenging the idea of enabling mothers to make an informed and free choice. One medical specialist argued that in promoting breastfeeding, health practitioners should make it explicit that mothers are expected to breastfeed.

I think that we as health practitioners should be a whole lot more directive to first time mothers anyway that they are expected to take these kinds of

educational programmes and they are expected to follow through, and the expectations should be laid out and the expectation is that you are going to breast feed. You don't know how to do that so we are going to teach you. And this is the way we are going to do it. (P22, 90)

She called for an approach in which the delivery of information is instructional and not oriented towards enabling women to make an independent choice. A maternity nurse manager agreed that women should be provided with information based on the expectation that they should breastfeed.

Presenting breastfeeding, as you know, the best, the this, the that type of thing, rather than presenting it matter of fact— this is just how you feed a baby. Why do you think we're different than anybody else in the world? That is the natural way to feed a baby. That's just what you do. (P1, 69)

The idea of directing information to women with the expectation that they will indeed breastfeed contradicted the claim made earlier that the role of practitioners is to “empower” mothers to make an informed feeding choice and to respect their autonomy. This approach is not consistent with Nutbeam’s emphasis on the development of personal capacity to act independently—a key feature of practices directed to enhancing interactive and critical health literacy. So while “informed choice” was the centrepiece of the practitioners’ description of their efforts to give information on infant feeding, the extent to which their reference to “informed choice” reflected an informed and free choice is debatable. Moreover, by valuing science over culture, their notion of informed choice appeared to overlook different types of knowledge that women can draw upon in choosing how to feed their infants. This idea is pursued further in Chapter 6.

Claims of some practitioners that women were already informed about the benefits of breastfeeding and just do not act on this information, also raised doubt about whether their efforts were indeed informing mothers’ choice. One family

physician said, *“most people know from the information that we give them. Most people are literate about breastfeeding; they know it is good for the baby”* (P19, 082). A public health nurse contended that most pregnant women know before they come to prenatal classes that breastfeeding is best, and *“they all say they’re going to try and some will say I’m going to breastfeed, but it’s rare when you get someone that says I’m not breastfeeding”* (P11, 112). As discussed in Chapter 2, the literature suggests that most women, including those who bottle feed, are aware of the benefits of breastfeeding. Of course, while mothers may be aware, and say their choice is to try to breastfeed, they may, in fact, not breastfeed. I explore this contradiction between mothers’ claims that they will give breastfeeding a try and their actual breastfeeding experience later in this chapter.

In summary, the notion of informed choice appears to be a highly contentious concept as it pertains to breastfeeding promotion practices. Although some practitioners used the rhetoric of empowerment as they spoke about providing information to enable women to make their own decision about how to feed their babies, the idea of enabling mothers’ independent thought and action seemed to be often overshadowed by the assumption that informed mothers will indeed breastfeed. Next, I examine the extent to which their descriptions reflect practises which are directed to informing choice or persuading women to breastfeed.

5.2.1.1 Informing choice or persuading women to breastfeed?

Knaak (2006) claimed that making an informed choice on infant feeding depended on the mother’s access to factual information which is based on scientific

evidence. Although mothers were considered ultimately responsible for how they feed their babies, Knaak said that practitioners had a responsibility to provide them with appropriate information to make an informed choice:

Mothers empower health professionals by seeking out their knowledge and expertise. Health professionals, in turn, empower mothers by respecting their decision-making autonomy. The linchpin of this relationship is the communication of scientifically-sound, impartial information. (Knaak, 2006 p. 413)

The practitioner-client relationship was central to practitioners' talk about their practices. There was some question, however, about the extent to which information shared through this relationship could be considered impartial and only based on scientific evidence. While many practitioners espoused the importance of evidence-based practice and their need to provide factual information to enable women to make an informed choice, their provision of information appeared to not always be impartial or complete. Some practitioners suggested that rather than presenting unbiased information to mothers about feeding options, they provided information which was clearly biased towards breastfeeding. For example, one primary health nurse stated that women were, in fact, not being presented with the information they needed to make an informed and rational choice between breastfeeding and bottle feeding.

It is definitely biased towards breastfeeding, the information you receive. It is not an equal choice people [practitioners] are giving people. We don't talk about the benefits of formula; we only talk of the benefits of breast milk. (P6, 283)

Few practitioners talked about discussing alternatives to breastfeeding. Scant information about bottle feeding appeared to be provided to expectant mothers. As one public health nurse said. *"I mean bottle feeding's pretty basic ...we don't give them a lot of information"* (P11, 484). A maternity nurse reported that little is said about bottle feeding in the hospital. *"I don't ask them do they need this*

information... I make sure that I do mention it but I cannot say that a lot of people have ever come to me in the last year requesting information about bottle feeding” (P28, 265). Whereas priority was often placed on delivering information about breastfeeding, information about bottle feeding tended to be provided only upon request. This practice reflected little consideration for mothers’ information needs and the context in which they used information in making feeding decisions. Moreover, not only was bottle feeding not discussed, it appeared to be implicitly discouraged by the emphasis on delivering breastfeeding information. Providing information about breastfeeding was routine practice according to one public health nurse, who said:

Automatically we would provide them [with breastfeeding information]. And even if somebody says to me, ‘no I’ve decided’, I will usually say to them: ‘Have you thought about? Do you even entertain the thought [of breastfeeding]? And if you’ve decided not to, what are your reasons?’ (P12, 033)

One maternity nurse said, *“I have heard mothers say that they only teach about breastfeeding in public health”* (P28, 237). A public health nurse admitted that, like most public health nurses, she advocated breastfeeding but that she also supported mothers in their choice:

Maybe as professionals we do, we do push it [breastfeeding] maybe. Certainly in prenatal classes and I won’t speak for everybody but I know when I do them and I speak of breastfeeding I tell people ultimately ‘it’s your choice but here are the reasons why it’s considered to be the best option. If you choose not to, we’ll support you. We’ll help you make sure that the baby’s well fed and we’ll look at formula mixing and all those things but this ultimately would be the best choice.’ (P21, 272)

This comment suggests that practitioners sought to strike a balance between encouraging mothers to breastfeed, while at the same time supporting informed choice. Despite their claims to support mothers, even if their choice was not breastfeeding, practitioners emphasized the provision of information favouring

breastfeeding. A dietitian argued that there should be even more effort to convince mothers that breastfeeding is better than formula feeding:

They [mothers] really need to buy into this [breastfeeding] is so much better for your baby. There is too much advertising that the formulas are equal, so there is not enough push on this is better. It is not equal to formula. Formula is not equal to breast milk. It is a second best, not an equal. (P25, 154)

The above comment suggests that messages and counter messages from proponents of breastfeeding and from those of formula feeding are likely to detract from the impartiality of information that women receive. In referring to her access to infant feeding advice, one participant in a mothers' focus group said, "You can pretty much find stuff to support or to go for or go against what you are looking for." (Mothers Focus Group # 2, October 26, 2006, p. 4). Her point suggests that mothers need to be able to judge the source and quality of information in choosing how to feed their baby. According to practitioners' descriptions, however, their efforts tended to be directed to persuading mothers to breastfeed rather than enabling them to develop skills to evaluate critically information from various sources in order to assess its reliability and relevance in making their feeding choice.

Thus, enabling the informed choice of mothers did not appear to be a neutral process of providing factual information about feeding options. While I was observing at the perinatal clinic, the prenatal classes and CPNP drop-in sessions, none of the practitioners discussed the comparative advantages and disadvantages of bottle feeding and breastfeeding with expectant or new mothers. In contrast, I observed many examples where practitioners exalted the benefits of breastfeeding

and urged mothers to try it.⁴⁸ My observation of these cases of selective presentation of information reflects Knaak's assertion that current infant feeding discourse in Canada is not impartial but rather characterizes an increasing gap between "the ideal of breastfeeding and the acceptability of formula as an alternative" (2006, p.412).

The problematic nature of providing unbalanced infant feeding information upon which mothers are expected to make a choice was pointed out by some practitioners. A nutritionist/policy analyst suggested that the passion for breastfeeding that some practitioners bring to their practice "*tends to undermine the creditability of the promotion of breastfeeding when it's associated with kind of an evangelical fervor that we usually associate with religious zeal*" (P10, 213). One primary health nurse agreed that breastfeeding should be promoted within this health district, but made a distinction between encouraging and coercing women to breastfeed:

We (this health district) should be a place that encourages breastfeeding. So if nurses would encourage, and depending on their personality, that encouragement might look very different. It might look like encouragement or it might look like coercion...If it is convincing, supportive, or if it is almost like coercion like there is not an option, 'you will do this'. (P6, 327)

Another primary health nurse suggested that practitioners, in their efforts to promote breastfeeding, may not present mothers with a realistic picture of breastfeeding and its demands:

But I really wonder when women are making decisions are they making it because they feel that they should or they truly have a buy in because in the long run we really make it sound easy. It is not that it is difficult but

⁴⁸ It should be noted that none of the practitioners interviewed indicated support for bottle feeding over breastfeeding.

there are certainly things that we don't anticipate happening like the lack of sleep. (P29, 186)

She suggested that while the benefits of breastfeeding are lauded, the challenges may be minimized.

There is a suggestion that some mothers felt pressured to adhere to their practitioner's advice to breastfeed their babies. According to one public health nurse, *"You'll often hear a family say, 'oh well you know they just feel like they have to because the nurse tells them it's the best thing'"* (P21, 272). Practices resulting in making mothers feel obligated to comply with their practitioners' advice contradicts Nutbeam's notion of an approach to practice which encourages a mother's independence in thought and action. Knaak, too, has argued that the communication of unbiased information is central to the practitioner-mother relationship and that failure to fully and fairly present the risks and benefits of breastfeeding and bottle feeding undermines this relationship. She argued that when the information is not impartial "the discourse takes on a manipulative character, threatening the foundation of trust so central to the relationship" (2006, p.413). Her point about the need for trust in relationships is central to tensions underpinning practitioners' descriptions of their interactions with clients, as noted later in this chapter (see section 5.4.2, p. 258).

In summary, as practitioners talked about promoting breastfeeding through their interactions with mothers, they suggested that information is often not presented impartially. The provision of persuasive information is not consistent with enabling mothers to make an informed and free choice. However, as discussed next, the promotion of breastfeeding is not only situated within the context of

informing choice but also within the context of normalizing breastfeeding. This too is potentially problematic as it can challenge the idea of personal empowerment underpinning Nutbeam's notions of interactive and critical health literacy.

5.2.1.2 Informed choice and normalization of breastfeeding

The normalization of breastfeeding was explicitly identified as a long term goal of breastfeeding promotion and support efforts as stipulated in the Policy Statement on Breastfeeding in Nova Scotia. The mandate of the Provincial Breastfeeding Committee and BFI (Baby Friendly Initiative) Committee was determined to “build commitment throughout the province for breastfeeding and to implement the BFI so that breastfeeding will be the cultural norm for infant feeding in Nova Scotia”.⁴⁹ Practitioners in this study suggested that until there is greater public acceptance of breastfeeding as the normal way to feed a baby, there will be a need to provide women with breastfeeding information. This point suggests that there are different ways in which women come to know about breastfeeding, for example through accessing information extolling the benefits of breastfeeding and through observing how babies are fed in their families and communities. Many practitioners referred to the lack of public acceptance of breastfeeding throughout this health district and contended that lack of breastfeeding support in their families and communities impacted on feeding decisions. For example, one LLL leader claimed that the extent to which breastfeeding is viewed as the normal way to feed a baby strongly influenced women's decisions on whether to breast or

⁴⁹ Policy Statement on Breastfeeding in Nova Scotia Point 5.5.VI, Approved September 2005, Updated 2006, p.3. See Appendix A

bottle feed their babies. She said, *“we’re of a generation where our mothers didn’t nurse, it wasn’t the norm and I think that that is probably one of the biggest decisions in whether or not a first time mom will decide to nurse or not”* (P20, 61). A family physician argued that, in the future, breastfeeding will be seen as the normal way to feed infants. He said, *“So it has to be sort of a cultural norm and it’s coming, but it’s going to take a generation before it’s the norm”* (P18, 41). Until breastfeeding is normalized, practitioners appeared to see a need to focus attention on the provision of breastfeeding information. Another family physician conjectured that as breastfeeding becomes more normalized, fewer people will need information about breastfeeding. She said, *“Hopefully more and more people will not need the information because it will be socially acceptable and they will just do it”* (P19, 332). Her comment suggested that cultural ways of knowing may take precedence over scientific ways of knowing in areas of feeding choice.

Many practitioners talked about the extent to which breastfeeding is becoming normalized. They suggested that this is happening both because mothers have increasing access to information and because there are increasing opportunities to observe women breastfeeding. One public health nurse said, *“The more they see it, the more they hear about it, the more it will become the norm”* (P12, 299). According to another public health nurse, *“it [breastfeeding] is becoming a little more normalized and it is OK to say it. I think that is where we are heading which is a good thing and we try to make it very easy for them to see that it is OK”* (P24, 170). One family physician reported that *“my children are being brought up with this is the normal way to do the feeding of your baby so there will be no bottles with my girls I hope”* (P18, 41). Another family physician said that *“one of the*

things to encourage people to breastfeed is to make it socially unacceptable not to breastfeed” (P19, 187).

These findings suggest that the provision of information was sometimes intended both to enable mothers to make an informed choice and also to change cultural norms. According to Nutbeam, outcomes of interactive health literacy extend beyond those accrued by individuals to the broader social outcomes of “improved capacity to influence social norms” (2000, p.266). However, practices directed towards changing social norms to support healthier choices can be problematic in that there is an assumption that individuals will comply with what is said to be the norm. As communication efforts frame breastfeeding as the normal way to feed a baby, mothers who deviate from this advice are open to being judged as poor mothers. Judging lifestyle choices and health-related practices against normative values can lead to moralizing. A mother who decides to bottle feed, despite the evidence, is open to being judged as a poor mother (Murphy 2000). Practices which prompt the judgement of mothers who fail to make the “right” feeding choice challenges Nutbeam’s idea of promoting mothers’ autonomy in thought and action. There is a conflict between enabling informed choice—a central aim of health literacy—and respecting personal autonomy when the decision of the mother does not adhere with the advice of the provider. I now focus on how practitioners’ talk reflects the moralization of breastfeeding as they confront situations when mothers’ “informed choice” is not the “right choice” according to expert advice.

5.2.1.3 Making the “right choice”: the moralization of breastfeeding

While it may be desirable for the health practitioner to promote personal autonomy and free choice, a mother’s choice not to breastfeed may be seen as a negative health choice for her baby. Her choice may not be seen to be in the best interests of her baby. Some practitioners clearly stated that they wanted to help women to become good mothers and that breastfeeding falls within this goal. For example, one maternity nurse made the link between infant feeding and good mothering when she said, “*The feeding of your baby is part of becoming a mom and we are very interested in that; we would like to see you make the right, the good choice for you and your baby*” (P3, 467). In the same vein, a public health nurse suggested that practitioners have a role in communicating information which women need in order to become good mothers. She said, “*I guess it all goes back to being able to communicate the information that’s necessary for moms to be good moms and there’s a whole broad range of information*” (P11, 552).

The assumption that practitioners know best what information mothers need in order to be good mothers privileges scientific and technical knowledge of health professionals while dismissing the indigenous knowledge and experience women bring to the task of feeding their babies—including their awareness of social and material constraints that may limit their feeding choices. This view does not reflect a respect for experiential knowledge or contextualized learning as seen in Nutbeam’s vision of interactive and critical health literacy practice.

The sense of failure associated with not breastfeeding was prominent as practitioners talked. For example, a public health nurse described how mothers feel when they are not able to breastfeed as advised:

And women that want to do everything right and you know are very conscious of doing the best practice for their infant will follow that guide that says breastfeed for four to six months. So, when they have their first baby, you know they only breastfeed for three months and now they're expecting their second baby, they have the big F for failure right there in front of them.(P30,148)

Many practitioners reported on mothers' apparent need to account for not breastfeeding. For instance, one maternity nurse said that when mothers feel they need to justify their decision to bottle feed, it was a sign that the message for breastfeeding was actually being received.

When you ask them the question when they come in on how they're feeding their baby and they say that they're bottle-feeding, they have a justification for doing that. Whereas, if someone says they're breastfeeding, they don't have a justification for why they're doing it...So I think that there must be more and more of the message getting out there. (P1, 136)

This tendency for mothers to account for their decision not to breastfeed was reported by Murphy (2004) in her study of mothers' infant feeding choices in the East Midlands of England. She found that non-breastfeeding mothers gave excuses and justifications when feeding decisions deviated from the widely accepted expert advice. One medical specialist attributed mothers' need to account for their decisions to the practitioners' breastfeeding promoting efforts. She admitted that health professionals were judgemental and implied that this judgment was inevitable.

I think the ones that are being judged are the ones who don't choose to breastfeed because now we [health practitioners] are judgmental and they feel they have to explain these choices to everybody... They always give me an explanation for why they are bottle-feeding as opposed to breastfeeding whereas breastfeeding ones just say I am breastfeeding. So I think now that has come to be and I don't know if that is necessarily wrong, we have done that. Now people are beginning to feel they are a little uncomfortable

that they have to explain the bottle-feeding or provide an explanation or excuse and I think that is part of the process. (P22, 258)

Maternal guilt associated with not breastfeeding was frequently mentioned.

However, practitioners varied in the extent to which they viewed mothers' feelings of guilt as a concern. Some practitioners claimed that mothers' feelings of guilt were warranted. For example, it was the contention of one public health nurse that because they are not acting in the best interests of their babies, mothers should feel a sense of guilt. She claimed that there were "*very, very, few physical limitations that would cause you not to breastfeed*" (P21, 212) and that "*overall maybe mothers should feel a little bit of guilt*" (P21, 212). She also speculated that as breastfeeding becomes normalized, those who do not breastfeed will be even more inclined to feel guilty:

If the norm of breastfeeding was accepted as part of our social society, mothers would feel guilty about not breastfeeding, the same way people now feel guilty smoking. And perhaps moms should feel a little bit guilty when they don't breastfeed because they're not offering the baby the best they can. (P21, 212)

One LLL leader also associated maternal guilt with failure to make the "right choice". However, she made a distinction between guilt and regret:

I tell moms there's a difference between guilt and regret. Guilt is when you knowingly do something wrong, in this case, making them sick, making the choice to go with formula versus breast milk and then having to deal with issues because of that. If you make that [choice] as a truly informed decision that you've accepted that there were risks and [if] one of those came true, there's guilt. (P5, 373)

She asserted that guilt was justified when a mother knowingly made a decision which was not in the best interests of her child. The implication was that the choice was indeed informed. Murphy argued that "the deviant mother is not simply one who breaks the rules. Rather her deviance rests upon a judgment that she has broken the rules *knowingly*" [emphasis in original] (Murphy 1999, p. 188).

Mothers are considered to be held accountable because they ultimately make the choice.

Some practitioners were obviously uncomfortable with what they deemed a judgmental approach taken by some practitioners. For example, a comment from a public health nutritionist suggested that some practitioners intentionally made women who reject their breastfeeding advice feel guilty:

Coming from someone with no experience, to be judgmental about how someone is feeding their child or how they are doing anything is just ridiculous because I don't think until you are there can you understand that in some ways like with a lot of life situations. And so again it is probably like throwing all the information at somebody and then when they don't do it that way, making them feel guilty. (P2, 343)

One public health nurse pointed to the criticism that she and her colleagues confronted concerning efforts to encourage mothers to breastfeed. She said, “*Best practice tells us that breastfeeding is the best thing for mom and baby but we’re putting the pressure on when we suggest to the mom that she should breastfeed*” (P21, 204). This comment reflects the tension between scientific evidence and moral judgement, and acknowledges the conflict that practitioners faced in promoting breastfeeding when mothers’ actions did not comply with practitioners’ evidence-based advice. Another public health nurse suggested that a good relationship between practitioners and clients can help offset the discomfort that mothers can have when they do not adhere to the advice to breastfeed. She said:

I have a good rapport with my clients and they know and I always stress as much as you’re trying to promote something you have to let people know that if they don’t, that’s OK too. You know you can’t say you’re a bad mom if you don’t breastfeed. So you’re trying to find the balance all the time. (P16, 073)

Striking a balance between maintaining their relationship with clients and promoting breastfeeding appeared to be a challenge for practitioners. I explore this later in this chapter.

In summary, whereas some practitioners recognized the tensions mothers and practitioners can experience as the result of the moralization of breastfeeding, others were more likely to see it as an inevitable part of the process of normalizing breastfeeding. Talk which reflects practitioners' moralization of mothers' feeding choices is not consistent with Nutbeam's argument for practices which foster personal autonomy.

In this section of the chapter, I have examined the extent to which practitioners' descriptions and observed practices suggested that their efforts to promote breastfeeding relied heavily on the transmission of information not only through means of the written word but also through oral means of communicating with clients. In addition, their description of practices to enable mothers to make informed choices on infant feeding was often in contradiction to Nutbeam's suggestions for practices which value experiential knowledge, contextualized learning, and independent thought and action. Their comments about informed choice, especially those which referred to the moralization of mothers who choose not to breastfeed, reflected an essential problem faced by practitioners. The problem, simply stated, was how to support positive health behaviours while supporting autonomous thought and action of their clients.

Next, I examine the extent to which practitioners recognized and identified ways to advance interactive and critical health literacy as they talked about their breastfeeding promotion practices.

5.3 Extent to which breastfeeding promotion practices reflect ways to advance interactive and critical health literacy

Nutbeam suggested that both interactive and critical health literacy enhance a person's capacity to use information in health-related actions, such as in the case of a mother being able to act upon advice she receives to breastfeed. First I look at whether and how practitioners' descriptions of their breastfeeding promotion practices reflect ways to improve their client's personal capacity to act independently on knowledge about breastfeeding, as suggested by Nutbeam's argument for interactive health literacy. I then examine the extent to which what they said reflects efforts to improve individual and community capacity to address social determinants of health as suggested by Nutbeam's view of critical health literacy.

5.3.1 Strengthening personal capacity to act on information through interactive health literacy

Nutbeam argued that practitioners should shift their practice from transferring information to efforts "directed towards improving personal capacity to act independently on knowledge, specifically to improving motivation and self-confidence to act on advice received" (Nutbeam, 1999, p. 52). In describing their practices, practitioners did not explicitly address the role of interactive health literacy in enhancing a mother's capacity to act on advice given. Embedded in practitioners' talk, however, were references to the overlaying themes of

enhancing motivation and self-confidence, and to enabling social support among breastfeeding mothers. I begin by looking at the extent to which their talk reflects ways to enhance maternal motivation and self-confidence, and then I turn to social support.

5.3.1.1 Improving maternal motivation

There was only passing mention of clients' motivation and little in the way of how practitioners might improve clients' motivation to act on the information about breastfeeding. One medical specialist pointed out the difficulty in motivating individuals, especially those with less literacy, to access information about breastfeeding:

Well I think for breastfeeding especially, it is not a disease or an illness so people have very little motivation to acquire knowledge about it. So motivation plays a big factor in it. So if you look [at those] challenged in terms of literacy, this is going to be a double whammy type of thing. (P22, 146)

Inasmuch as this comment relates to acquisition of knowledge rather than use of information, it still focuses on information transfer, not capacity to use information provided.

Some practitioners referred to ways to address lack of maternal motivation as a barrier to information access among marginalized groups. In particular, they talked about the use of incentives. In referring to the food boxes that CPNP clients received, one CPNP coordinator said that *"the people that really need it may be more willing to come"* (P7, 154). Incentives were reportedly used in CPNP efforts in a First Nations community. Gift certificates for food and baby products, for example, were provided to mothers to encourage them to attend prenatal

classes. The health centre coordinator said, *“You’ve got to entice them with certain things and the bad part is if you have a mom that’s got the financial means [and] doesn’t need any of your help and has had kids before, [then she] doesn’t feel like wasting her time coming to prenatal classes”* (P17, 366). This comment emphasizes the focus of incentives on getting mothers to participate in programmes even if mothers determined they did not need to access information. Reported use of material incentives does not reflect a focus on enabling maternal autonomy.

Increasing maternal motivation to act on information is more complicated than enticing women to a programme where they can access information about breastfeeding. Attesting to the challenge practitioners appeared to have in finding ways to motivate clients to act on their advice to breastfeed was their need to direct persuasive information to their clients, as discussed earlier in this chapter. The fact that practitioners had little to say about practices which reflected ways to enhance motivation speaks to the challenge it poses. I next look at how they talked about breastfeeding promotion practices which reflected ways to enhance clients’ confidence.

5.3.1.2 Improving maternal self-confidence

Compared to their limited references to motivation, practitioners talked more forthrightly about enhancing mothers’ confidence in acting on advice to breastfeed. Their comments reflected elements of instilling a sense of personal autonomy in clients with respect to their feeding choices. One LLL leader, for

example, argued that mothers needed to be confident and assertive in declaring that the choice on how to feed their baby was theirs:

I think that [confidence] is definitely a part of health literacy as well is saying OK you have to go with your gut with what you're comfortable with and have the confidence to say 'OK back off this is my decision not yours. You raised your kids. You did it your way. This is how I'm going to do it' (P20, 234)

A public health nurse pointed to the role of practitioners in empowering mothers to feel confident in their feeding choice:

We need to empower women to feel confident about their choice. So, I don't see it as a one-time issue, it's part of enabling women to make their choices and to have the discussion and to have the fortitude to say 'I've made this choice. This is the best choice for my child and myself and my family and this is what I stand by. I feel comfortable about that'. (P12, 207)

Enhancing maternal self-confidence was explicitly tied to respecting independence in choosing how to feed her baby. A public health nutritionist was adamant about the importance of maternal self-confidence, but less sure of what practitioners could actually do to support it. She suggested that directing excessive information to women could overshadow efforts to enable women to feel more confident:

So I think confidence is huge. I don't know how you do instill that. Maybe it is that we throw too much knowledge at women about it and we don't talk about how, you know, some women feel really confident about this and others don't and 'how do you think you feel about it in your own confidence'? (P2, 151)

Although this practitioner questioned how practitioners can help instil greater maternal self-confidence, she emphasized talking with clients about their feelings about breastfeeding, including their level of self-confidence. One maternity nurse talked about the importance of enabling mothers to feel sure of themselves when they encountered conflicting opinions on how to feed their babies. She said, “*I keep telling them, I say you know your baby. You know yourself, I say yes you will*

have all kinds of opinions out there and you will have all kinds of conflicting information out there, but you know your baby” (P3, 455).

However, not all practitioners’ comments reflected maternal confidence as an asset. One public health nurse viewed a mother’s confidence in her feeding choice not as a strength but as a barrier as she attempted to promote breastfeeding to her.

If it’s ‘I’m going to formula feed this baby by bottle’ they’re quite confident because they’re quite adamant about it. It’s almost like ‘Don’t try to change my mind because this is what I’m doing’ whereas if you’re trying to open their mind to feed them a little more information, to educate them a little bit so I say ‘Let me educate you; you can still keep your decision but if you change it’. (P16, 189)

Here, maternal self-confidence was reframed as resistance. A mother’s confidence in her decision not to breastfeed was seen to limit the practitioner’s ability to relay information which could possibly influence her choice. This comment suggests that priority was placed by the practitioner on directing information to influence her client’s decision, rather than supporting her self-confidence in her choice and enhancing her sense of autonomy.

In summary, although there appeared to be an awareness among some practitioners of the importance of increasing a mother’s motivation and self-confidence in choosing how to feed her baby, practitioners offered few practical suggestions on how they could do this. The imperative to encourage breastfeeding may override practitioners’ efforts to foster enhanced motivation and self-confidence and ultimately, mothers’ capacity to act independently on advice provided. This approach does not align with Nutbeam and Renkert’s suggestion that “By using the concept of health literacy to guide the content and delivery of health education, attention is focused on the development of the skills

and confidence to make choices that improve individuals' health outcomes, rather than being limited to the transmission of information" (2001, p.382). Whereas their descriptions of practices yielded little in terms of ways to develop maternal motivation and confidence, more attention was directed to enabling social support among their clients, as discussed next.

5.3.1.3 Enabling access to social support

While practitioners did not explicitly link social support to enhancing health literacy, they talked about the value of social support in enabling women to make and act upon a decision to breastfeed. Social support is defined as "that assistance available to individuals and groups from within communities which can provide a buffer against adverse life events and living conditions, and can provide a positive resource for enhancing the quality of life" (WHO 1998, p.20). According to Nutbeam, social support is an important determinant of health and "may include emotional support, information sharing and the provision of material resources and services" (1998, p. 283). Practitioners suggested that enabling mothers to access social support was especially important because many women live in social environments that do not support breastfeeding. Not only did practitioners talk about enabling mothers to access social support through other women, they also mentioned providing social support directly to their clients.

Many practitioners considered mothers' access to social support more important than access to information about breastfeeding. According to one primary health care nurse, "*there are circumstances where it is difficult for women to breastfeed*

and I think support is number one...I don't think information is everything is what I am saying" (P29, 074). Another primary health nurse said, *"I think the family support is the most important"* (P6, 35). A health centre coordinator in a First Nations community suggested that social support from family members or health professionals was more important to mothers than what they had read:

They think that they have the literacy ... thinking that just because they've read that information that they've got it and that's not it. There needs to be a sustainable support network in place and whether that be mom, dad, grandma, grandpa, whatever, but there has to be a support network. (P17, 439)

One public health nurse described how a mother sought her help so that her pregnant daughter could receive information about breastfeeding and other perinatal issues. She said, *"Literacy-wise she wasn't capable of taking in all of the information that we were offering in a (pre-natal) session but certainly if this young woman had not had her mother's support we would have never seen her prenatally maybe not even post-partum"* (P 21, 105). These comments suggest that social support is especially important when low literacy is a concern. Lee et al. (2004) have argued that social support is critical to health literacy as it may offset the negative effects of low functional literacy on health literacy.

Some public health practitioners claimed that mothers could benefit more from face-to-face discussion about breastfeeding than from receiving factual information. For example, one public health nurse suggested that *"it may not necessarily be books or videos; it may just be talking to them and supporting them and helping them to understand this is what's quote 'normal' for your baby and you"* (P16, 477). Another public health nurse made a clear connection between social support and a mother's confidence in her feeding choice. She said, *"They*

can have the information, but if they don't have the support and they haven't been able to talk it through and they don't have the conviction of their choice, then it's not going to work" (P12, 199). She implied that a mother's self-confidence could be enhanced by interacting with someone who supported her feeding choice.

Practitioners referred specifically to themselves as a source of social support to their clients. For example, one public health nurse suggested that public health nurses could play a role in supporting clients when other sources of social support were limited:

There may not be a lot of other support out there. If people don't have family or friends or parents or extended support from family and friends and if we're not in there as much as we can be, then, not that we're the be all and end all but I think we've (public health nurses) got a very important role to play. (P16, 473)

According to a public health nutritionist, practitioners should first identify a mother's need for information and then consider how to improve their self-confidence and access to social support. As she explained:

It starts with well they don't understand the information, right. But then it takes you off from there cause you can say they don't understand the information and then it makes you think about confidence and then it kind of brings you to that well we can increase the information, the level understanding of the written materials and then we can create social support for women to talk about these issues. And we can also talk about how they feel. (P2, 407)

She described an evolving process that began with determining a client's need for information but then moved to identifying what women needed to act upon this information. Furthermore, she implied that practitioners could play both a direct and indirect role in enabling social support for mothers as she talked about "*how important it is to have that conversation with a woman to provide that or try to link them into social support*" (P2, 256). Her concern about applying an approach

to practice which could strengthen mothers' capacity to act on the information received is consistent with Nutbeam's support for interpersonal communication and efforts to enhance interactive health literacy.

When women lack support by their family or community, some practitioners were considered to be in a position to help them access the support of breastfeeding mothers. A LLL leader talked about how practitioners could bring women together to share common experiences and concerns. She referred to the importance of "*having that support when you're in a group with other moms who are going through the same things as you are and I think having that support is huge*" (P20, 162). Creating opportunities for women to observe others breastfeed and to support each other in their breastfeeding experience appeared to be a practical way of supporting breastfeeding in a community where breastfeeding is not the norm. A public health nurse suggested that bringing women together could strengthen their confidence in breastfeeding and, ultimately, help normalize breastfeeding. She gave the family resource centre as an example of a setting where women could access social support for breastfeeding:

I think that it [the family resource centre] is a very valuable support in itself. If a lady's here and she's very self-conscious and she goes and there's another young mom who's in the same situation and she's more comfortable with herself for whatever reason. I think that's a valuable experience for moms to see that it's not abnormal to breastfeed your baby. That is a perfectly normal healthy thing to do. I think the more people who do it, the more it becomes normal and people are more comfortable doing it. (P21, 248)

The suggestion that the family resource centre was a place where mothers could feel comfortable breastfeeding and could access support from others is in keeping with Nutbeam's focus on creating "opportunities to develop skills in a supportive environment" (2000, p. 266).

In summary, practitioners referred to social support as extremely important in enabling women to engage in breastfeeding—even suggesting that enabling access to social support was more important than providing women with breastfeeding information. Their description of efforts to enable mothers to access others who could provide social support with respect to breastfeeding fits well with Nutbeam’s call for practices which not only provide information but strengthen capacity for individuals to use the information they receive. Whereas this discussion has addressed the extent to which reported practices reflect ways to enhance personal capacity to act on information through interactive health literacy, the next section examines ways to enhance community capacity commensurate with Nutbeam’s view of critical health literacy—in particular by attention to addressing socio-economic determinants of health.

5.3.2 Improving individual and community capacity to address determinants of health through critical health literacy

Although some practitioners talked about ways of enabling mothers to access social support, few mentioned efforts to address other determinants of health.

Nutbeam suggested that advancing critical health literacy required “the provision of information on social and economic determinants of health, and opportunities to achieve policy and/or organizational change” (2000, p.266). He defined critical health literacy as “the more advanced cognitive skills which together with social skills can be applied to critically analyse information and to use this information to exert greater control over life events and situations” (2000, p.264). As practitioners in this study talked about their promotion and support of breastfeeding, few described practices aimed at changing individual action, public

policy or organizational practices which reflected understandings of critical health literacy.

Nevertheless, there was some evidence of their awareness that socio-economic conditions could determine the capacity of mothers to act on advice to breastfeed. This health centre coordinator described socio-economic barriers to breastfeeding which women face in her First Nations community.

I don't know how we're actually going to be able to promote breastfeeding when we live in an area that our economics is so low. Like I really don't know how we're going to be able to bring our breastfeeding rates up. Because even if you're off [employment], you're only getting 50-55% of what you normally make and I don't care what anyone says staying home and being on EI [Employment Insurance] for the duration, it still is not enough. And if you don't have an employer that tops you up from your EI like what the government is doing for their employees, then it's not going to work. (P17, 149)

She went on to point out that many were unable to breastfeed because they worked in the retail sector for low wages. She said, *“we have tons of people who work at Wal-Mart and Supervalu and their wages are not an excessive, you know what I mean, amount of money so therefore it would be really, really hard for them to be able to take a full year off”* (P17,157).

One primary health nurse argued that a mothers' capacity to act on an informed choice could be constrained by her living circumstances and that practitioners needed to consider this when promoting breastfeeding. She said, *“I think they (practitioners) need to know that it is not always a choice—we think of it as ‘choosing’ based on what everyone else has to work with”* (P6, 68). Her comment reflects the complexity of the concept of choice as it relates to infant feeding. As Murphy, Parker and Phipps (1998) pointed out, there is an interplay of material and cultural factors which limit women's power to make infant feeding choices (see Chapter 2, section 2.3.1). They suggested that thinking of women's infant feeding practices as a reflection of “women's ‘power, right or faculty to choose’

how their babies will be fed ignores the multiple ways in which their freedom to choose is constrained” (p.264). The primary health nurse quoted above went on to explain how the interaction of literacy with income, employment, and gender impacted the lives of many women in this health district and thus, their ability to breastfeed.

Their circumstances, if you have to go back to work two months after you have a baby because there is no money, there is no maternity leave, there is nothing. ... if you struggle with literacy therefore you probably also struggle with employment, going back to work is an issue. (P6, 79)

Her description of the social and economic context in which women made feeding decisions suggests that a woman’s capacity to breastfeed depended on policies related to secure income, employment benefits and maternity leave, and child care.

A public health nurse also talked about the interdependence of literacy with other social-economic conditions influencing the lives of women, as follows:

They may not have the financial, you know they may not be able to work or have a job that’s paying well enough to have good finances which will allow them to eat better. You know it’s affecting everything, or to have transportation to get to wherever the child may learn other socialization type of skills. Or they may not be able to get their children to the swimming pool to get exercise. You know there are so many things that are interrelated when it comes to low literacy. It really impacts not only their health... it all comes back to the determinants of health. (P16, 165)

As described in Chapter 3, access to health information, services and support of rural mothers in the district could also be limited by large geographical distances, sparse population, isolated communities, and lack of public transportation. One CPNP coordinator described how rural women and families most in need of support and information were least likely to be able to access such supports:

The ones that probably need it the most are the ones who are not going to get there because of transportation, money and whatever other reasons. It is just not going to happen, it is like everything else. They just fall between the cracks. It is never the ones that need it the most that get it. (P26, 504)

This comment speaks directly to the seriousness of social and economic disparities within the district. However, practitioners gave few specific descriptions of how their breastfeeding promotion practices took into account the socio-economic context of their clients' lives. One striking exception was offered by a public health nurse working in a remote fishing community. She spoke about what she must consider in giving infant feeding advice to women in her community:

In [name of community] where a lot of work is seasonal, it depends on when they have a baby. If I had someone that was having a baby and wanted to breastfeed and they were having the baby April/May, and they fish with their husband for their winter stamps [employment insurance], then it would be touchy, right. Because there are a lot of females here who fish with their husbands to make money. The other thing is that the fish plant here is seasonal, right. The call centre that is here that employs people is shift work. So if they can get enough hours in before hand for their stamps, well they do have time off; but if not, they are thinking about going back in 3 to 6 months. (P24, 278)

She pointed out how scarce opportunities for employment—and thus family income— influenced both the mother's decision on whether to breastfeed or not and if so, how long. In her interactions with women in this remote fishing community, this public health nurse appeared aware that the context of their everyday lives has a significant impact on a woman's decision to breastfeed or bottle feed. She said, *"If I had a mom who was pregnant and delivered in September and was interested in breastfeeding and started, she (would) probably continue until the spring but (would stop when) she was going fishing or was called back to work or whatever"* (P24, 282).

One primary health nurse claimed that most practitioners did not collect enough information about the life circumstances of their clients in order to understand

fully the context in which women could realistically be expected to act on the feeding advice provided:

They don't look at the determinants of health when they are giving this information to people. So it's like prescribing an antibiotic and not knowing that someone cannot afford it. It's like prescribing breastfeeding when this woman has to go back to work in three weeks— not knowing the context. As practitioners, we don't ask enough information about that because we think it is none of our business. So we are giving people advice thinking that they are like everybody else, average people with a certain level of skill and income and support, we don't delve into it. We're embarrassed. It is not our place. (P 6, 343)

She argued that without considering how literacy level and related socio-economic factors influenced a woman's everyday experience, practitioners could not situate advice about infant feeding within the context of their lives. As noted by one medical specialist, often practitioners did not know how to ask their clients about either literacy or other socio-economic factors which could influence their capacity to act on advice to breastfeed:

It's really hard to ask the questions that would bring it [literacy level] out because you don't want to be patronizing and you don't want to humiliate people...I find it really hard to even ask them what kind of job they do or if they're working because then they have to tell you that they're not and that they're on social assistance. (P27, 165)

Without gleaning information about the circumstances in which women live, practitioners could be hard pressed to understand how mothers were able to act upon the information that encouraged them to breastfeed. One of the premises of Nutbeam's health literacy model is that practitioners recognize the context in which clients make health decisions. It would appear that community-based practitioners may have had more opportunity to develop such awareness than medical-based practitioners.

In summary, although practitioners appeared aware that the socio-economic context of women's lives influenced their feeding choices, there was little

description of specific ways used to either identify individual constraints or to address conditions which limit women from acting on advice to breastfeed. There was little evidence of practices consistent with Nutbeam's emancipatory understanding of critical health literacy in addressing social determinants of health. Moreover, the uncertainty and discomfort of practitioners in identifying and addressing social determinants of health is reminiscent of the discomfort in confronting low literacy in their practice that was talked about in the previous chapter (see section 4.4, p. 195).

In the following section, I take a deeper look at the extent to which practitioners' talk reflects tensions and dilemmas related to Nutbeam's dimensions of interactive and critical health literacy.

5.4 Tensions and dilemmas in breastfeeding promotion practices related to interactive and critical health literacy

My analysis of practitioners' description of their breastfeeding promotion efforts reflects some underlying tensions which suggest challenges in operationalising Nutbeam's views of health literacy. Most prominent are difficulties which were identified as practitioners described practices relevant to enhancing interactive health literacy. Less prominent are difficulties associated with enhancing critical health literacy. Practitioners gave few reports of enabling clients to change the socio-cultural and economic conditions that constrained them from acting upon advice to breastfeed. Although what they said reflects little about enhancing critical health literacy through an emancipatory approach, as suggested by Nutbeam, their discomfort in identifying and addressing social determinants of health was apparent. As well, practitioners made few references to enabling

clients to appraise information critically in order to assess what is reliable and appropriate for use in their own circumstances. Although I focus in this section on practices reflecting tensions associated with enhancing interactive health literacy, notions of critical health literacy—by their absence—are thus noteworthy.

I now identify some of the difficulties that surfaced as practitioners talked about their breastfeeding promotion practices. They include 1) dealing with excessive and often confusing information directed to mothers about infant feeding from multiple sources; 2) promoting breastfeeding while building and maintaining a relationship with their clients; and 3) drawing on two competing ways of knowing about and understanding breastfeeding— scientific expertise and experiential knowledge.

5.4.1 Dealing with the abundance and inconsistency in information from multiple practitioners

Breastfeeding information is provided to expectant and new mothers by a wide variety of lay and professional practitioners in community and medical settings. Whereas some practitioners talked about the imperative of providing breastfeeding information to empower women to breastfeed, there was a suggestion that often there is too much and inconsistent information coming from different practitioners which can be confusing to mothers.

The volume of information received by mothers was frequently mentioned in practitioner interviews. However, comments from mothers attending two focus group sessions also attest to the fact that they received more information than they

could read. For example, one participant talked about dealing with a plethora of information from different sources, saying, *“Bags of information came home during the pregnancy. Everybody gives you something. Every time you go someplace— the doctor, perinatal clinic, here (family resource centre), everywhere you go”* (Mothers’ Focus Group # 2, October 26, 2006, p. 3). A mother in another focus group said, *“I have a whole big bag of information at home and I might have only read half of it”* (Mothers’ Focus Group #1, October 24, 2006, p.5). As another mother claimed, it was easy to overlook relevant information, *“It might be second or third baby but there might be more information that you might be missing all together”* (Mothers’ Focus Group # 2, October 26, 2006, p. 3). Not only could women be overwhelmed by information, they were often given print information without any discussion with the practitioners about what they received or follow-up. One mother put it this way: *“A lot of times when they give out that information, they don’t say it verbally because they are giving it to you in a pamphlet and they assume you know because they gave you the pamphlet”* (Mothers’ Focus Group # 2, October 26, 2006 p. 4).

The above comments from mothers reflected the priority given to providing print-based infant feeding information to mothers, often with no awareness of their context or any meaningful follow-up with mothers.

One public health nurse expressed her sense of scepticism as she talked about the large amounts of information directed to expectant mothers. She referred to providing pregnant women with a prenatal education bag of information, including infant feeding information without knowing if they needed or wanted it:

How do we know what they know? How do we know? So we need help. Figure that out in your study! This has been going on for a long time, health literacy for a couple of years. I know when we fill the bags there are 23 pieces of information! (P15, 516)

Based on my personal observation of practice settings in this study, I would agree that mothers tended to be inundated with information. At the time of my interviews, many practitioners gave me copies of materials they distributed. I also observed numerous booklets, breastfeeding posters and handouts on display in settings such as the perinatal clinic, family resource centres, and public health offices and, to lesser extent, physicians' offices.

However practitioners' views were mixed with regard to the benefits of directing so much information to expectant and new mothers. Whereas some saw it as overwhelming, others viewed it as "empowering". One CPNP coordinator suggested that information was valuable because it encouraged women to breastfeed, *"I think the more information the mother has the more ready she is to take control and say, 'well this is what the information [is]; this is what's out there'. So giving her the information only empowers her to keep on [breastfeeding]"* (P4, 427). She was of the opinion that mothers needed access to factual information supporting breastfeeding to be 'empowered' to breastfeed. Similarly, a public health nurse in a rural area where breastfeeding was not widely accepted referred to the "empowering" role of information, *"Your people can't be empowered unless they have the knowledge and the information and the things that feed the process. So you don't have one without the other"* (P12, 237). While both of the above practitioners suggested that a mother's sense of empowerment depended on her access to information, neither referred to a mother's ability to determine if the information received was relevant to her own situation. However,

another public health nurse suggested while women might be able to access information, some have difficulty applying this information within their life circumstances:

Some you know are really good at tapping into educational materials and then being able to internalize that and apply it to their own situations. Others you know will read it but you know they can't really apply it to their own situations. They need a little bit of almost knowledge translation or transfer from what is written material to their own life. (P30, 89)

Other practitioners pointed to the need for mothers to not only receive information but also be able to act upon it in making feeding choices. One LLL leader talked about the dependence that some mothers had on her as a practitioner, *"You know she can only do it because she keeps coming back asking little questions that aren't necessary or (about) things that she should be empowered to do herself"* (P5, 189). Her comment made no mention of the practitioner's role in enabling mothers to develop skills to act independently on the information received.

Not only did it appear that women received an overabundance of information about infant feeding and other related issues, they often received conflicting information that influenced their choice and management of breastfeeding. This problem was pointed out by practitioners in this study as well as in the literature (Knaak 2005; Hausman 2003; Wolf 2003). One maternity nurse said, *"I think they are still getting different messages from different practitioners"* (P1, 232). In a similar vein, a primary health nurse said, *"There is a huge problem around different information from different people, absolutely"* (P6, 341). One public health nurse said, *"The lack of consistency of information coming from health care practitioners, it's an issue for a mom"* (P30, 241). Another maternity nurse said, *"you have to have all of your health care workers on the same page because these*

women are depending on you for answers and they are getting conflicting information” (P28, 352). Another public health nurse agreed that contradictory advice was a problem, as she said, *“It’s one thing to be getting information from different sources if it’s reinforcing the same thing but if you’re getting conflicting information from [different] sources, it becomes an issue because they [mothers] don’t know what to believe anymore”* (P21, 324). Ironically, as pointed out by a number of mothers earlier, the barrage of information may confuse rather than inform and ultimately limit mothers’ capacity to make an informed feeding choice.

While practitioners recognized that exposure to conflicting infant feeding information from diverse sources could result in mothers’ confusion, little was said about their efforts in enabling mothers to appraise critically the information they received. There was a lack of practices described which reflected specific ways to enhance critical health literacy. In their exploration of maternal health literacy, Renkert and Nutbeam (2001) contended that expectant mothers needed to develop the ability to analyse information critically. Without being able to evaluate conflicting messages critically, women would likely find it difficult to determine what information was reliable and useful to them in making their feeding choices.

The imperative to transmit information on breastfeeding to expectant and new mothers appeared to overlook the need for practices directed at building capacity for women to act on this information—a pattern of practice which is not consistent with Nutbeam’s ideas of enhancing interactive and critical health literacy.

However as discussed next, there is some evidence of recognition among some practitioners that the current emphasis on directing breastfeeding information to mothers is not ideal.

5.4.1.1 Challenging the emphasis on information transmission

Some practitioners suggested that they needed to refocus their practice away from information transmission and move towards approaches more consistent with strengthening mothers' capacity to act on information.

Breastfeeding information may not be what women need from practitioners. One primary health nurse said, *"I think sometimes we can force information on women and I don't know if that is always the best... it may not be what people need at the time"* (P29, 258). A CPNP coordinator argued that rather than providing mothers with information which could confuse them, it might be better to refrain from giving them advice and respect the knowledge that they already had:

Yeah, telling her one thing and then saying now don't do that, do this and do that and she's just getting more and more upset and then she can't. And sometimes people think that they have to rely on health care professionals when really they've got it all if they just maybe leave them alone. (P. 4, 519)

Her viewpoint is in accord with Nutbeam's premise that experience and knowledge which individuals bring to an issue needs to be validated and their personal autonomy in thought and action supported.

Practitioners' focus on providing information they considered clients needed, however, could overshadow their ability to develop capacity to act on this information in choosing how to feed their babies. One public health nutritionist

suggested that practitioners should redirect the focus of their practice away from giving factual information to assessing what their clients needed to know, *“I think we go with this, ‘well let’s just go and provide them with all of the information’ instead of maybe starting with what do they need to know and having a conversation”* (P2, 27). She also argued that having a conversation—implying a two-way sharing of information between the practitioner and individual—could help practitioners identify their needs as well as instill confidence in mothers. She added, *“Some of the things that I think need to happen in terms of providing more social support for women, and having those conversations with women about confidence and feelings. I think that it is time”* (P2, 248). Her comment reflected her concern that it was time to shift to a way of practice that better aligns with Nutbeam’s notion of interactive health literacy—one that focuses more on developing their personal skills and self-confidence and less on directing information to them. Her suggestion supports Nutbeam’s argument that practices which apply means of engaging women in interactive communication are more likely to strengthen personal capacity to use information than merely relaying information.

In summary, practitioners’ emphasis on information provision appears to overshadow their attention to practices which might enable mothers to appraise information critically, to determine its relevance to their lives, and to ultimately strengthen their capacity to use it. Whereas some practitioners considered the provision of breastfeeding information as a way to empower women, others suggested that practices needed to shift away from a focus on information transmission and move to building mothers’ capacity to use information as

Nutbeam suggested. I turn now to addressing tensions in practice revealed in practitioners’ descriptions of interpersonal ways of communicating breastfeeding information.

5.4.2 Promoting breastfeeding while fostering the client-practitioner relationship

Practitioners reported their preference for communicating information about breastfeeding by means of face-to-face contact with clients. They suggested that the relationship they established with their clients was essential if they were to discuss breastfeeding. Furthermore, maintaining this relationship was viewed as critical for any ongoing interaction with the mother and her family as health issues emerged. From the perspective of mothers, knowing that they could access information from a practitioner they knew and trusted can be seen as a health literacy skill. It speaks to the idea of generativity—an aspect of health literacy mentioned in Chapter 2 (see section 2.2.3.2, p. 44) and discussed further in Chapter 6. In this section, I look at what practitioners said about relationship building and the dilemma they faced when their promotion of breastfeeding jeopardized their relationship with mothers.

Practitioners, especially those in community settings, frequently talked about the importance of building and maintaining a trusting relationship with their clients. One rural-based CPNP coordinator said, *“It’s probably the most important thing really, to make sure that they trust you”* (P7, 162). One public health nurse suggested that nurses in smaller communities were better able to work with families because *“you have kind of that rapport that’s different because you know the people, you know the supports, you know the community... I have an idea of*

how I have to approach this family” (P12, 081). A medical specialist attributed the increase in breastfeeding rates in First Nations communities largely to the personal relationship that women had with their public health nurses—not to the information they received. As she explained:

But I don't think the written information really has got anything to do with it... it [personal contact] works so well for young Native women who've got so many other strikes against them. ... And they seem to be extremely successful at choosing really engaging people [as public health nurses] who can relate to the clients. (P27, 045)

She suggested that personal interaction was more important than information provided through the written word and pointed to the value of this relationship to mothers over time. She said that it was helpful to have the public health nurse “*coming into their houses to look after problems with the children that come up*” (P27, 041). According to one primary health nurse, the relationship established with a mother centred on infant feeding “*carries over to feeding throughout childhood ...that person [practitioner] was so good to me when I couldn't [breastfeed]... I could ask them about snacks for my toddler*” (P6, 449). Given the potential for future engagement, it is not surprising that practitioners considered protecting their relationship with mothers to be a critical part of their practice.

Practitioners, however, suggested that a lack of concordance between the practitioner and the client could jeopardize their practitioner-client relationship. This could be the case when a practitioner promoted breastfeeding to a client who did not want to breastfeed. Practitioners talked about their need to balance two competing priorities—promoting breastfeeding while fostering their client relationship. As one family physician said, “*I don't want them to not come to me*

or to feel that I am being overbearing ... I mean I want them to breastfeed” (P19, 139). A CPNP coordinator suggested that having a trusting relationship meant respecting the mother’s feeding decision: “I feel you have to respect their (feeding) decision otherwise then they don’t trust you, then you’ve lost that connection” (P 7, 106). Her comment implied that the relationship hinged on respect for the mother’s autonomy.

Some practitioners were emphatic that maintaining a relationship with mothers and their families was more important than the immediate concern about promoting breastfeeding. One public health nurse described the conflict she experienced between adhering to breastfeeding policy and protecting her relationship with clients this way:

Often times there’s a conflict between what policy is saying and what reality is. The reality is that breastfeeding is one part of a healthy family or a healthy relationship and it becomes a fine balance with do I push that issue to the point that the mother shuts me out and I don’t get to do anything over here or do I balance the scales, get as much as I can get here, influence as much as I can, and still keep the door open to help out over here....as a public health nurse I would never implement a policy that would close me out of that home, because I have a responsibility to that family as well for the long term. (P12, 219)

It was not surprising that practitioners working in community settings, such as public health nurses, family physicians and CPNP coordinators who served the same individuals over the long term, were vocal about preserving their relationship with their clients/patients. Practitioners in medical settings who were more likely to have short-term contact with clients, however, also expressed the tension they faced in providing information about breastfeeding. They too sought to maintain their relationships. For example, one maternity nurse talked about how she explicitly told clients that she had an obligation as a health professional to

provide information on breastfeeding to all women attending the perinatal clinic:

“I say, as a professional, I have to give you the information about breastfeeding.

The ultimate decision is yours but as a professional I am expected to give that information about breastfeeding” (P3, 087).

Rather than declaring their professional duty to talk about breastfeeding, some practitioners reported curtailing their discussion of breastfeeding when women were not interested. One dietitian pointed to this tension. As she said, *“you are kind of holding back on giving them the right information—what you want to give them ... you don’t want them feeling bad but still it is a hard place to be sometimes”* (P25, 280). These comments suggest that there was a professional imperative to discuss breastfeeding even when clients were not interested. Urging a mother to breastfeed, however, could override respect for her personal autonomy in choosing how to feed her baby—a situation which could erode their relationship.

Practitioners suggested that skilful communication strategies were required to offset the potential threat that a breastfeeding discussion could pose to the practitioner-client relationship. One example of communication tactics became apparent as I examined practitioners’ reflections on the meaning of “give it a try”—a phrase that featured prominently as practitioners described their interactions with mothers about breastfeeding.

5.4.2.1. The tactical use of the phrase “give it a try”

It was suggested in practitioners’ talk that reference to “giving it a try” could help resolve the conflict that both practitioners and mothers faced when making an

informed choice on breastfeeding was not acted upon. By suggesting that a client “give breastfeeding a try”, practitioners avoided making a moral judgement when a mother’s choice was contrary to their advice on breastfeeding. In turn, by claiming to give breastfeeding a try, a mother could avoid offending her practitioner whose advice she was reluctant to act upon. Talking about giving breastfeeding a try appeared to be a way for both practitioners and mothers to deal with the tension associated with lack of concordance around breastfeeding. “Give it a try” appeared to serve as a face-saving strategy used to avoid severing their relationship as practitioners and women communicated about breastfeeding.

As practitioners described their interactions with clients about breastfeeding, they often attributed levels of success or failure to the breastfeeding effort. One CPNP peer leader suggested that women who did not at least try to nurse their babies were likely to feel guilty because breastfeeding was promoted so widely. She said, *“The guilt of not trying it or trying it and not succeeding especially now that it is pushed so much. The idea of breastfeeding is such an important thing; you know it seems to me that you would feel bad if you did not try”* (P 8, 468). Some practitioners directly confronted the issue of maternal guilt as they interacted with clients. For example, a public health nurse claimed that she was able to avoid making pregnant women feel guilty by encouraging them to try breastfeeding. In her case:

I certainly would not make them feel guilty or anything like that but I would say ‘do you want to try?’ I am very up front with them and they know because I have been talking about it for the 9 months of pregnancy. ‘You should do this, think about it, and even try it.’ (P24, 146)

By framing her advice to breastfeed in a more tentative manner, she appeared to be both trying to keep the opportunity for dialogue open on breastfeeding while

avoiding a challenge to the mother's autonomy. Another public health nurse described how she told her clients that they would have no regrets if they would at least give breastfeeding a try. She would say: "*I'd rather see you try and if it doesn't work, then you tried and you've got no regrets, but if it does, that's an even bigger plus.*" So often times, well I'll say 'give it a try' and you get success with some and you don't with others" (P12, 45). Of course, the implication is that if the mother does not at least attempt to breastfeed, she will in fact regret it. An element of guilt remains.

Encouraging women to 'give it a try' may help practitioners address the problematic nature of informed choice when their aim is clearly to promote breastfeeding. Pragmatically, practitioners can fulfil their role in informing clients about the best way to feed their babies while still allowing them to exercise their informed and free choice by just "giving it a try". Goffman (1967) has shown that individuals in social interactions often engage in face-saving strategies. The tactic of "give it a try" may be seen as a way to keep open the possibility of breastfeeding, while not challenging a mother's free choice on how to feed her baby—and thus avoid a communication breakdown that could jeopardize the practitioner-client relationship.

Ironically, practitioners told their clients to "give it a try" but questioned what lay behind the phrase when used by mothers. A maternity nurse claimed that when a mother said that she would "give breastfeeding a try", she was revealing her anticipation of failure and acknowledging that she had an alternative which was less difficult:

To me it means that it can fail. Why can't bottle feeding fail? You know, it always kind of tweaks my interest why somebody answers the question that way—that 'I am going to try breastfeeding'. You know there is another option if I don't succeed at breastfeeding. (P28, 041)

The nurse suggested that the anticipation of failure reflected a lack of commitment to breastfeeding: *"It is never 'I am going to try to bottle-feed. I am going to try to breastfeed or I am going to give it a try'"* (P28, 049). Of course, if practitioners valued their clients' personal autonomy, they would be less likely to expect that their clients would indeed breastfeed. Moreover, practitioners would not necessarily consider it simply a lack of commitment when a mother did not breastfeed.

Several practitioners talked about the time and effort they invested in building a relationship with their clients in order to support them in breastfeeding. One rural public health nurse described a situation in which she made repeated visits to a woman with limited education who had bottle fed her first baby. Although convinced that this mother would indeed give breastfeeding a try, *"by the time we get her home from the hospital she's not breastfeeding. So it's very disheartening and discouraging but you just have to keep going"* (P16, 061). Although her comment implies her sense of failure as a practitioner, later she said, *"I shouldn't be egotistical enough to think that she is doing it for me but I don't know... Maybe she's trying to show me that she's trying to do whatever's right"* (P16, 73). As she grappled with what was meant when women said they would give breastfeeding a try, she said, *"I think that maybe that gets back to why they feel like they should try whether it's only for a day or an hour or a minute, 'I tried, you know, and I couldn't and this is why it's OK now because I did try'"* (P16, 265). Her

description reflected the personal investment put into building a relationship with her clients in an effort to encourage them to breastfeed.

Practitioners' comments suggest that if mothers succeeded at breastfeeding, both mothers and practitioners could share in the success. The implication was that mothers were acting on the information they received from their practitioners. However if mothers stopped breastfeeding, mothers—not practitioners—failed because they were ultimately responsible for making and acting on the feeding decision. By talking about “giving it a try”, both could escape accusations of not living up to the expectation that an “informed choice” really meant a choice to breastfeed. To some extent this strategy could be viewed as a means of protecting maternal autonomy. One could question, however, the extent to which it is in keeping with Nutbeam's focus on improving personal capacity to act independently on information received. Practitioners' use of the “give it a try” strategy appeared to be a face-saving approach used to protect the practitioner-client relationship, and not a way to strengthen personal and social skills consistent with the Nutbeam's idea of interactive health literacy.

In summary, the relationship between practitioners and mothers was considered to be central to practitioners' efforts to promote breastfeeding. Personal forms of communication were vital. Here was an approach which, according to Nutbeam, is more conducive to enhancing interactive health literacy. However, the fundamental conflict remained between promoting breastfeeding as the best way to feed a baby, and respecting a mother's informed choice. Practitioners needed to be skilful in their communications in order to avoid jeopardizing their relationship with mothers.

Next, I explore how practitioners' descriptions of their practices reflected tensions between different ways of knowing about breastfeeding, i.e. between scientific knowledge and experiential knowledge—the latter being a key feature of Nutbeam's view of interactive health literacy.

5.4.3 Promoting breastfeeding through competing ways of knowing

Practitioners across medical and community settings suggested that they drew upon both scientific and experiential knowledge to provide advice to mothers about breastfeeding. There was an undercurrent of tension running through practitioners' descriptions of their interpersonal efforts to promote breastfeeding. It especially arose as they talked about the priority given to scientific knowledge over experiential knowledge. Practitioners in medical settings tended to place more emphasis on scientific/medical knowledge and less on experiential knowledge than did those in non-medical settings. I begin by looking at the extent to which scientific knowledge appeared to be privileged knowledge.

5.4.3.1 Valuing scientific knowledge and medical expertise

In the health district in which this study was set, the provision of breastfeeding information was undertaken within the context of a highly organized system of information delivery designed and largely controlled by medical practitioners. Many practitioners throughout the district referred to the centralized breastfeeding expertise of health care professionals located at the regional hospital and, more specifically, in the perinatal clinic. As mentioned earlier, the need to increase breastfeeding rates in the district was the motive behind creating the perinatal

clinic (see section 3.4.2.1, p.111). In 1997, the perinatal clinic was designed to serve as the gateway for mothers to access breastfeeding and other perinatal information from various practitioners. As one medical specialist explained, “*So we made it [perinatal clinic] and have been working on it for 8 years getting the clinic as the initial point of entry into the system and then the clinic nurse would help parents decide in which direction that they needed to go*” (P1, 037). Further evidence of the priority given to the delivery of expert driven scientific/medical advice was the decision in 2005 to train four hospital-based lactation consultants to advise mothers on breastfeeding.

My analysis of practitioners’ talk indicated that health professionals, especially hospital-based practitioners, were inclined to give preference to scientific knowledge over experiential knowledge. One maternity nurse emphasized the need for “*research-based information*” (P28, 380) and criticized practitioners who relied on their own breastfeeding experience. She said, “*Your experience isn’t necessarily the right answer today. You got to move; you got to keep up to date with information*” (P28, 372). In talking about what was needed to enable women to breastfeed successfully, this hospital-based dietitian claimed that “*the biggest thing is discussion with your health care practitioner*” (P25, 074).

The strain between medical/technical expertise and experiential knowledge of breastfeeding was apparent in practitioners’ descriptions of a proposed telephone support programme that was being discussed during the time of the study. It would involve mothers experienced in breastfeeding as lay practitioners of information. One maternity nurse explained how the technical knowledge of

lactation consultants and the experiential knowledge of lay practitioners would be used to delineate their respective scopes of practice in providing breastfeeding information to mothers who would call the help line. As explained:

It's a hospital initiation but it's using lay people, if you will, that have breastfeeding experience and knowledge to be the supportive network. ...They're [hospital staff] providing education for them [lay practitioners] so that they can be of support to the mother. The role is well defined in that they are a support person for the mother, they [mothers] don't have to have technical expertise, they're not problem solvers when you would need a lactation consultant's advice on certain issues. (P1, 100)

This comment reflects the privileging of scientific knowledge of health professionals over experiential knowledge of lay practitioners. This point was reinforced by a maternity nurse who said, *"I think they [lay practitioners] have to be the ones providing support not the information. They are not there to identify problems"* (P3, 502). It is hard to imagine how a clear line could be drawn between providing support and problem solving as practitioners—professional or lay—when mothers would call with a feeding concern. Favouring the expert knowledge of health professionals dismissed the experiential knowledge of lay practitioners as well as that of mothers who might call the help line. The suggestion that health professionals are responsible for solving mothers' feeding problems, in contrast to engaging mothers in problem solving, is not consistent with practices which reflect respect for experiential knowledge, contextualized learning and the independent thought and action that Nutbeam proposes.

However, given the concern mentioned earlier about consistency of information coming from different practitioners, it was not surprising that health professionals had reservations about the role of experiential knowledge in the provision of breastfeeding information. One public health nurse attributed mothers' confusion

to the information they received from individuals who were informed by their own personal experience in feeding their babies, not by scientific evidence.

We hear that a lot from moms who are coming home, 'I just didn't know what to do' and it's always like there's too much information coming and there needs to be, there's no standard line, but we need to stop reacting to some of the things that we see based on, I guess, personal experience or whatever. We need to base it on fact. (P12, 259)

One lactation consultant suggested that since most health professionals involved in providing breastfeeding information had received training, there were fewer problems with women receiving contradictory messages. She said, *"I think the thing is now since the majority of us have taken the 18 hour course, we are more consistent in our approach and what we are saying"* (P3, 451). Achieving consistency in information appeared to be seen as imperative, as was justification for basing advice on scientific knowledge rather than experiential knowledge. As one LLL leader pointed out, *"These moms need consistent information but unfortunately experience isn't a consistent teacher"* (P5, 341).

Next, I look at the extent to which practitioners' description of practices reflects their level of support for experiential knowledge.

5.4.3.2 Valuing experiential knowledge and breastfeeding expertise

Some practitioners challenged the privileging of scientific knowledge and talked about how valuable experiential knowledge about breastfeeding could be for expectant and new mothers. One family physician said, *"No matter what you read, the experience is going to be different so at that time you need that verbal 'hands on' help"* (P19, 292). A primary health nurse claimed women need information on the experience of breastfeeding more than technical or factual information: *"We*

do give enough information about the process [techniques] of it or the benefits of it but I don't know that we give enough information about the experience of it and that is where the mothers or people with the experience can add to that" (P29, 202). The assertion that practitioners should enable women to access information from those who have experienced breastfeeding is consistent with Nutbeam's emphasis on respecting the experiential knowledge that adults bring to learning situations.

Practitioners frequently referred to their own experience as mothers when considering effective sources of information and support for breastfeeding. One primary health nurse suggested that an inexperienced mother was likely to feel more comfortable accessing breastfeeding information and support from those who had breastfeeding experience and who were more likely to understand her situation. She said:

I could sit here with a mother and watch her breastfeed... maybe a good friend, a good neighbour who breastfed, would be visiting, who might have more access to mother and baby. Well she [new mother] might feel more comfortable because they may know some of her personal circumstances."(P29, 098)

The contention that a mother could relate best to someone they trusted and who was familiar with her life circumstances is supported by Gore and Madhavan's (1993) finding that assessing credibility of health information is a function not only of expertise but also of trustworthiness and empathy shown by the source. This viewpoint underscores the importance Nutbeam placed on practitioners' understanding of the context in which individuals learn new practices.

Some practitioners suggested they drew upon experiential knowledge derived from having breastfed their own children in their interactions with expectant and new mothers. A health centre coordinator talked about promoting breastfeeding with women in her First Nations community. She said, “*sometimes it’s a lot easier to get through to other people when you have your personal experiences*” (P17, 121). A public health nutritionist suggested that because she lacked breastfeeding experience, she only had factual information to offer her clients:

I think we are probably seen by them as the expert... I am helping women learn about breastfeeding and infant feeding but I have never done it myself, so I don’t feel like the expert. ... ‘I am not trying to pretend that I know what that is like for you. I am just trying to help you the best that I can and give you some information.’ (P2, 167)

Her comment implies that one needs to have experienced breastfeeding to be an expert.

It is particularly striking that several community-based practitioners claimed that they did not view themselves as experts. Several reported minimizing their technical and professional knowledge while highlighting their experiential knowledge of breastfeeding when interacting with clients. For instance, a public health nurse talked about not positioning herself as a breastfeeding expert when conducting prenatal classes; however, she referred to her personal breastfeeding experience as follows:

To me an expert means that you’ve got all the answers, and I don’t feel that I have all the answers....I do tell them at class that I’ve breastfed. I just feel that maybe just knowing that that they’ll feel more comfortable.... Now there’s something about an expert that I feel I’m not quite there. (P11, 320)

Her comment suggested that crediting one’s experiential knowledge may be a useful strategy in enabling women to feel more comfortable and open to talking

about breastfeeding. CPNP coordinators also said that they did not want to be considered breastfeeding experts. For example, one CPNP coordinator said, *“I try to tell people a lot of times, I am just here, I am no expert... I am just like you—I try to make them feel as comfortable as I can”* (P26, 532). By downplaying her potential role as an expert, she appeared to be striving for a more egalitarian relationship with her clients. Another CPNP coordinator claimed that she was not a breastfeeding expert and reported that she referred women with breastfeeding problems to other practitioners with more professional expertise:

My role here is more supportive than giving out medical advice. So I may tell them or may explain to them, or explore with them what’s going on but ultimately it’s off to the physician or to [name of lactation consultant] or to the public health nurse or to the public health nutritionist. (P4, 214)

Here, a distinction was made between supporting breastfeeding and providing advice on the management of breastfeeding problems.

A health centre coordinator said that in her First Nations community no one was considered an expert. She said, *“I don’t think we consider anybody to be an expert. I think we are all just trying to give a hand to each other and just support”* (P17, 205). Her observation that the concept of “expert” was not prevalent within her community is consistent with literature which suggests that such concepts are culturally determined. For example, according to Smylie (2006), Canadian Aboriginal Peoples may assume a more egalitarian approach to health promotion. Practitioner reservations about applying an expert approach to breastfeeding promotion practice supports the claim by Zarcadoolas, Pleasant and Greer (2006) that using an expert model may not be the best way to address complex public health issues. This viewpoint is discussed further in Chapter 7 as it relates to implications for practice.

In summary, findings reflected a privileging of scientific knowledge over experiential knowledge—the latter being a key feature of Nutbeam’s notion of interactive health literacy. There appeared to some tension between these different ways of knowing about breastfeeding as practitioners talked about their practices. The idea that both mothers and practitioners drew from different ways of knowing about breastfeeding is explored further in the next chapter.

5.5. Summary and conclusion

Practitioners’ descriptions of their breastfeeding promotion practices and the practices I observed reflect some aspects of Nutbeam’s notion of interactive health literacy; however, there is little evidence of critical health literacy in their talk. Compared to practices reported and observed in the perinatal clinic and prenatal education class setting, those in the CPNP setting appear more consistent with Nutbeam’s call for less focus on information transfer and putting more emphasis on engaging individuals in sharing experiential knowledge, contextualizing learning, and encouraging independent thought and action. Inasmuch as there is an assumption among practitioners that an “informed choice” means the choice to breastfeed, information tended to be directed to persuading women to breastfeed rather than offering a truly balanced and more fully informed choice. Moreover, practitioners’ talk that reflected moralizing judgements of mothers who did not breastfeed challenges arguments to respect personal autonomy and contributes to tensions in practice, particularly in the practitioner-client relationship—a central concern for practitioners’ breastfeeding promotion practices.

There was limited reference to practices reflecting practitioners' recognition and identification of ways to advance interactive and critical health literacy. Although a few strategies to enhance interactive health literacy as a means of developing mothers' capacity to act on information provided were described, practitioners seemed to direct their attention to enabling women to access social support and to develop self-confidence in their feeding choices. Although there was some evidence of awareness that socio-economic conditions influenced maternal feeding decisions, there was little mention of ways to address conditions which limited the capacity to act on breastfeeding advice. These findings support Nutbeam's assertion that a critical health literacy orientation is the least likely to be applied in health promotion practice.

A number of difficulties emerged in practices related to interactive and critical health literacy. The first addressed the overload and inconsistency of information flowing to mothers from various practitioners. While this situation appeared troublesome to some practitioners, others saw the flow of breastfeeding information as essential to empowering women to make an informed choice. Little was said about enabling mothers to appraise information critically in order to assess its reliability and relevance to their circumstances. The second difficulty in practice was related to practitioners' tensions in communicating with mothers who chose not to breastfeed. Sustaining their promotion of breastfeeding while maintaining a trusting relationship with clients appeared to require communications tactics on the part of practitioners. Lastly, the conflict between scientific knowledge and experiential knowledge in the provision of breastfeeding information divided practitioners. Whereas respect for experiential knowledge is

consistent with Nutbeam's health literacy model, most of these health professionals reported concern that information must be consistent and their call for evidence-based information reflected the privileging of scientific knowledge.

In conclusion, whereas Nutbeam urged health practitioners to shift their practice beyond a focus on transferring information to build capacity among clients so they might act on information provided, these findings suggest that this transition in thinking and practice has some way to go with respect to breastfeeding promotion in this district. In the next chapter, I explore how practitioners' descriptions of their breastfeeding promotion practices reflected dimensions of health literacy that are consistent with the concept of multiple literacies.

Chapter 6

Reflections of multiple domains of health literacy in practice

6.1 Introduction

In this last of three chapters where I present my findings, I examine how practitioners' descriptions of their breastfeeding promotion practices reflect different dimensions of health as described in the current literature. As noted in Chapter 2, attention has turned to thinking about health literacy in ways that draw on the notion of multiple literacies. In particular, Zarcadoolas, Pleasant and Greer (2005, 2006) proposed a public health approach that extended from Nutbeam's model of health literacy. They contended that individuals need a composite of human skills and different ways of knowing about health to operate in today's complex, information-intense, environments. Building on the idea of the plurality of literacy, these authors argued that health literacy is composed of various domains of literacy. For them, health literacy stretched along a continuum with individuals having a range of competencies that contributed to their ability to apply health concepts and information as situations arise. That health literacy competence developed with experience and could be transferred to deal with new situations reflected its generativity. Like Nutbeam, they argued that a health literate person was better able to make choices related to personal health, and such as person could participate in individual and collective actions to address the social determinants of health.

Zarcadoolas, Pleasant and Greer claimed that health practitioners, as agents of the systems in which they interact with the public, created health literacy demands

and expectations within their health settings. Practitioners could reduce these demands, however, to accommodate individuals as well as enable them to apply their health literacy skills in using and maybe even changing the system. They alleged that because individuals and their health practitioners work in tandem to address health issues, the health literacy abilities of both were interconnected—even though this contention adds to the complexity in thinking about and operationalising health literacy (Pleasant, personal communication by email May 16, 2008).

In essence, three key characteristics distinguish this broader approach to health literacy.

- Health literacy integrates multiple domains which include, besides fundamental (or functional) literacy, scientific, cultural and civic literacies.
- Health literacy consists of a dynamic group of productive and generative skills which individuals apply as new situations arise.
- Health literacy refers to the interaction between individuals and their practitioners, and thus is dependent on the ability and skills of both.

In this chapter, I begin by examining the extent to which practitioners' descriptions of their practices reflected ways in which practitioners drew upon these multiple dimensions of health literacy in the promotion of breastfeeding. I then turn to looking at the extent to which ways to advance scientific, cultural and civic domains of health literacy in their practice are reflected in their talk. Finally, I examine the extent to which their talk reflects tensions and contradictions related to these multiple domains of health literacy.

6.2 Extent to which practices reflect multiple domains of health literacy

Examination of practitioners' descriptions of their breastfeeding promotion practice suggested that practitioners drew upon different ways of knowing which is consistent with the multi-faceted notion of health literacy that Zarcadoolas, Pleasant and Greer propose. First I look at whether and how their talk reflects the dynamic and generative nature of health literacy and then I focus on the extent to which it reflects ways in which they draw upon the multiple domains of health literacy in their promotion of breastfeeding.

6.2.1 The dynamic and generative nature of health literacy

Practitioners talked about how mothers applied the knowledge and skills they gained about infant feeding as new situations arise. Their comments reflected the dynamic and generative nature of health literacy in enhancing mothers' capacity to address family health issues. According to Zarcadoolas, Pleasant and Greer, the generativity of health literacy "enables health literate people to make more informed decisions, to benefit from healthier choices, and to have degrees of independence from experts and knowledge intermediaries" (2006, p. 67). They suggested that health literacy capabilities develop across the life course as people encounter various situations in which requirements for health literacy are imposed by changes in their health status or demographic, socio-political, psychosocial, and cultural factors. The formative nature of health literacy enables one to respond as the demand for accessing, understanding, evaluating and using information emerges in various health contexts.

One public health nurse suggested that the knowledge and skills acquired by mothers in feeding their babies provided a base for dealing with future parenting concerns:

I think it [health literacy] can be perhaps even a foundation stone for looking at decision making more generally around parenting so having the avenue to get information in that area may then empower that mom to have a strategy for getting information in another area in parenting or in other areas of health. (P9, 249)

Her comment echoed earlier sentiments of practitioners about the importance of enabling new mothers to become health literate so they could access information from various sources and respond to emerging family health concerns.

A coordinator of a First Nations health centre said that since staff began bringing women together for prenatal classes, mothers have come back to them with suggestions for sessions on other family health issues as they arise:

..more and more are starting to come here and saying ‘You know what, my son and daughter is having a problem with this. It would be really nice if you could get somebody down here or if you could do a workshop on this topic or whatever’. (P17, 383)

Comments implying that mothers sought ways to develop their own capacity to address emerging issues is consistent with the claim by Zarcadoolas, Pleasant and Greer (2006) that health literacy “consists of a dynamic group of productive and generative skills a person calls upon when facing new situations” (p.67). The idea of health literacy as dynamic and generative appears particularly appropriate to the health literacy challenges facing new mothers. They confront novel situations on an ongoing basis and are required to access, understand, evaluate and use information to address health concerns as their children develop. I now address the extent to which practitioners’ talk reflected ways in which practitioners drew on multiple domains of health literacy.

6.2.2 Ways in which practitioners drew upon ‘multiple literacies’

As practitioners described their practices, they often referred to drawing from different ways of knowing in their efforts to promote and support breastfeeding. For example, in Chapter 4 I referred to comments from practitioners in which they implied that literacy could include learning in different ways (see section 4.2.1, p.173). I also noted in Chapter 5 that practitioners’ talk reflected a level of tension between scientific and experiential ways of knowing about breastfeeding (see section 5.4.3, p.266). Practitioners’ comments suggested recognition that there may be more to the idea of health literacy than a fixed set of traditionally defined literacy-specific skills.

Zarcadoolas, Pleasant and Greer (2005, 2006) have argued that a wide array of skills and conceptual understandings, derived from a manifold of literacies, are needed to be health literate today. Their multidimensional model of health literacy integrated four domains of literacy: fundamental literacy, science literacy, civic literacy and cultural literacy. In a similar way as Nutbeam (2000) claimed that “functional literacy” was “foundational” to health literacy, Zarcadoolas, Pleasant and Greer (2006) said that ‘fundamental literacy’ was the ‘keystone’ of health literacy. Their idea of fundamental literacy aligns closely with functional literacy but adds the distinction that besides basic reading and writing skills, it also includes speaking and computing as “fundamental ways people develop skills, acquire information and conduct daily life” (2006, p. 56). Zarcadoolas and her colleagues emphasized the interaction of the four domains of health literacy: fundamental, scientific, cultural and civic literacies. In Chapter 5, I focused my examination on functional health literacy. In this chapter, I examine the extent to

which practitioners' talk reflects ways in which they drew upon each of the three remaining health literacy domains—scientific, cultural, and civic literacy—in their efforts to promote breastfeeding. I begin with scientific literacy.

6.2.2.1 Drawing on scientific literacy

“Scientific literacy refers to skills and abilities to understand and use science and technology, including some awareness of the process of science” (Zarcadoolas, Pleasant and Greer, 2006, p.77). Zarcadoolas and colleagues described scientific literacy as comprised of knowledge of fundamental scientific concepts, an ability to comprehend technical complexity, and an understanding of scientific uncertainty. This also includes an understanding that change in the accepted science is possible.

Whereas practitioners in this study appeared to expect people to have adequate scientific literacy to understand the information they provided, there is little evidence of reported efforts to enhance clients' level of scientific literacy in order to become more health literate with respect to breastfeeding. Although practitioners frequently talked about promoting breastfeeding based on the scientific evidence supporting its health benefits, they provided little in the way of an argument that specifically drew upon scientific literacy as a component of health literacy. As noted in the previous chapter (section 5.2.1.1), many health practitioners reported pinning their practice on scientifically substantiated evidence that breastfeeding is best, whereas few described examples of providing scientific evidence that compared breastfeeding and bottle-feeding.

The use of scientific concepts and medical terminology can be problematic in communicating information about breastfeeding (see section 4.2.3, p.180). Some practitioners talked about the difficulty mothers have had in understanding concepts associated with lactation. One family physician said *“I am sure a lot of them would not know what colostrum was for instance so I mean, you could explain”* (P 19, 126). Another physician referred to the composition of breast milk as he said, *“The most common knowledge is just the immunoglobulins and things like that maybe, but I don’t think a lot of them know that it could prevent you from having a lot of allergies”* (P13, 177). A public health nurse said, *“I mean even the different hormones. You know if you’re not familiar with what they are, that can boggle anybody’s mind”* (P16, 109). Comments suggest that practitioners recognized the prevalence of scientific concepts in talking about breastfeeding and that these concepts may not be understood by their clients.

Whereas some practitioners suggested that it was important that clients needed to understand the scientific concepts and reasoning behind the information they provided, others disagreed. A First Nations health centre coordinator insisted that women should be able to understand the reasoning behind advice given to them.

She used the example of iron supplementation:

So you’re sitting there with these iron pills, you’re just saying ‘Yeah, my doctor made me take prenatal vitamins, I don’t know why, said I was low in iron, whatever.’ ‘Well do you know why iron is important? Did anybody sit there and explain to you why iron is important?’ These are certain things that need to be explained. You can’t just leave it up to the fact that a doctor told you so. (P17, 113)

One public health nurse, however, suggested that mothers did not want the scientific justification for advice given to them. She said, *“But I find that a lot of the people that don’t get a higher education don’t want to hear that anyway. They*

don't want to know all the technical, the background; they don't really care how their body makes it [breast milk]" (P11, 284).

Practitioners appeared to draw upon scientific literacy as a domain of health literacy as they gave breastfeeding information. However, their comments were mixed with respect to the extent to which they recognized a mother's need for or interest in developing scientific understandings relevant to the breastfeeding advice provided to her.

6.2.2.2 Drawing on cultural literacy

Cultural literacy⁵⁰ as a domain of health literacy refers to *"the ability to recognize and use collective beliefs, customs, world-view and social identity in order to interpret and act on health information"* (Zarcadoolas, Pleasant and Greer 2006, p.57). Zarcadoolas, Pleasant and Greer contended that cultural literacy should be integrated into health literacy practice at the individual, practitioner and organizational level.

Practitioners frequently talked about how socio-cultural factors played a significant role in determining how mothers throughout this health district fed their babies. For example, their awareness and concern that breastfeeding is not the cultural norm was noted in the previous chapter when they referred to the goal of normalizing breastfeeding (see section 5.2.1.2, p.228). Many practitioners claimed that support for breastfeeding may not exist if there is not a family history

⁵⁰ There are many definitions and usages of the term 'cultural literacy'.

of breastfeeding. For example, a public health nurse recognized breastfeeding as a socio-cultural practice in this observation:

It's so much more what people have been exposed to, what their mother did, what their sisters do, what their grandmother, you know, and of course we come from a long line of formula feeding with the previous generation so that has a tremendous influence. (P16, 253)

A nutritionist/policy analyst suggested that understanding the socio-cultural context in which mothers feed their babies can help practitioners recognize the barriers to breastfeeding which mothers encountered in their workplaces, communities and families. As he stated:

To understand the barriers that mothers face, why they don't breastfeed optimally and trying to help them overcome those barriers. Whether it is work place situations such as crèches. Whether it is access to the time needed to breastfeed or it's working on the cultural acceptability of mothers' breastfeeding in public if that is where they have their infants when they are hungry. And also working on the broader cultural influences on mothers, such as their in-laws, their families, and their grandmothers— others who influence their infant feeding practices. (P10, 050)

This comment implies that practitioners need to recognize conditions in which women live and work along with social networks that can either support or inhibit clients from breastfeeding. As pointed out in the literature, breastfeeding is a complex public health issue and women's feeding choices are not clear cut (see section 2.3.1, p.71). Schmied and Lupton (2001) have emphasized that “breastfeeding (or the decision to bottle feed) is structured through prevailing sociocultural meanings and economic conditions” (p. 236). The socio-cultural complexity of breastfeeding suggests that drawing upon cultural literacy may be of value to practitioners in their breastfeeding promotion practices.

Practitioners emphasized the lack of public acceptance for breastfeeding and that women often felt uncomfortable breastfeeding in public places—sometimes even

in the presence of others in their own homes. Their comments reflected the recognition of cultural differences related to public support for breastfeeding throughout the district. For example, practitioners such as one public health nurse suggested that there is less support in smaller and more rural communities:

I think breastfeeding here [Antigonish] seems to be more acceptable whereas in [more rural] Richmond you wouldn't— it's not as open. You won't see breastfeeding talked about or people are more private with feeding and I think that's just the nature of the community. You know maybe the university [in Antigonish], people are more, well you have different cultures... (P11, 072).

Her point that customs and beliefs related to breastfeeding differ across communities is consistent with the suggestion by Zarcadoolas, Pleasant and Greer that understandings of demographic and cultural factors are crucial aspects of health literacy. One physician attributed cultural differences to the greater acceptance of breastfeeding in a neighboring Mi'qmaq community compared to his rural French Acadian community. As he noted:

I think the Native community values breastfeeding more than us and I've seen people doing breastfeeding in public in the Native communities and so maybe it's something like a cultural thing. And here, being a small community, people know each other and usually they don't want to be seen in public with this. (P13, 093)

He suggested that understanding the socio-cultural context was relevant to the promotion of breastfeeding in these two communities. A health centre coordinator described how demographic and cultural influence breastfeeding practices in her First Nations community were important: “*We have a young population. We have young moms, a lot of young moms and the ones that are breastfeeding are the ones who had parents that influenced them in that direction*” (P17, 077). She explained that rather than turning to professional advice, First Nations women looked to their social and family networks for advice on infant feeding. She said, “*If they don't have the peer support, they're going to look to their moms. I don't*

think they're going to look to us [health practitioners]" (P17, 196). This comment reflects the importance in this community of informal learning. It says that individuals learn from everyday interactions without formal teachers or a set curriculum (Livingstone 2001). This point on informal learning has implications for breastfeeding promotion practices and the development of future practice. I come back to this in Chapter 7.

Practitioners' comments frequently pointed to the importance of understanding the socio-cultural context in which women throughout communities in this district make decisions about infant feeding. This finding suggests that they often drew upon cultural literacy as a domain of health literacy as practitioners.

6.2.2.3 Drawing on civic literacy

Zarcadoolas, Pleasant and Greer referred to civic literacy as the "skills and abilities that enable citizens to become aware of public issues to participate in critical dialogue about them, and to become involved in decision-making processes" (2006, p. 61). They described civic literacy as a domain of health literacy that acknowledges a requirement for multilevel and multiple sector responses to complex health issues. It includes media literacy skills, knowledge of civic and government systems and processes, knowledge of power, inequity and other hierarchical relationship, and knowledge that personal behaviours and choices affect others in a larger community and society. Civic literacy comprises a range of understandings that can enable people to judge sources and quality of information, access relevant information, know how to advocate for themselves and others, and how to relate their actions to that of the community collective.

In this study there was some evidence that reflected aspects of civic literacy as a domain of health literacy as practitioners talked about their breastfeeding promotion practices. Civic literacy was evident in ways that framed breastfeeding as an issue relevant to broader society, not just to individual mothers.

According to a nutritionist/policy analyst interviewed in this study, the socio-economic and culture context in which breastfeeding decisions are made relates to the rights of mothers and infants. He compared the situation in this health district with communities in developing countries. Drawing on notions of civic literacy, he suggested that the competing rights of the mother and child must be recognized in comparing risks and benefits of breastfeeding in various settings:

The risks here [in Canada] are not nearly so great. The promotion of breastfeeding, the mother's right to not breastfeed has to be seen in a different light. There is a tension between the rights of the infant and the rights of the mother in this case. (P10, 146)

This comment points to issues of power embedded within the issue of breastfeeding. These issues are relevant to maternal autonomy in choosing whether to breastfeed or not. By framing the breastfeeding issue beyond that of a mother's informed choice to include the broader social-cultural context in which she is making feeding decisions, the mother's rights gain more prominence. Given the strong tendency towards moralization of mothers based on their choice to breastfeed or not (see section 5.2.1.3, p.231), practitioners' recognition of the mother's rights appeared to be an important aspect of health literacy. According to Zarcadoolas, Pleasant and Greer, the ability to understand how power, inequity and hierarchical relationships impact health issues is an aspect of civic literacy. Drawing on civic literacy as a dimension of health literacy has implications for

addressing the tension between promoting breastfeeding and empowering women to make an informed and free choice, as explored further in Chapter 7.

One public health nurse told me about her advocacy efforts to change district health authority policy concerning the acquisition of free formula from formula manufacturers. She talked about institutional resistance to support breastfeeding through policy change. She drew on notions of civic literacy as she referred to the power relations operating within the health care system and formula companies, arguing:

One of the big issues related to that [supporting breastfeeding by the health care system] is the power structure within health care itself and who's controlling what and what other choices are out there for women and how much power is behind those choices and I'm referring specifically to formula companies. (P30, 205)

Engagement with civic literacy was also apparent as a CPNP coordinator talked about educating citizens regarding new approaches to health service delivery in the wake of reforms to the health system. She described how some health care practitioners had been reluctant to refer clients to community-based programmes and suggested that the public has been slow to look outside the traditional health system for breastfeeding information and support.

I think it [health literacy] means being open to new ways of delivering health, for instance, the [family resource] centre here. It's not been easy to get the buy-in from other health care practitioners and I think that communities are definitely more educated now about their health and where to go... They can get information about their health other than going into the hospitals. (P4, 567)

These various descriptions by practitioners reflected how they drew upon elements of civic literacy as they addressed the issue of breastfeeding. These efforts went beyond a focus on the individual woman who makes a decision to breastfeed or not.

In this section, I have explored the extent to which descriptions of their practices reflected ways in which practitioners drew upon multiple domains of health literacy in the promotion of breastfeeding. Although they did not explicitly talk about scientific, cultural or civic dimensions of health literacy, embedded in their descriptions were examples of ways in which they drew from these various ways on knowing. I now turn to exploring the extent to which their practice descriptions reflected recognition of ways to advance the health literacy of clients and the public with respect to each of these multiple domains of health literacy in their promotion of breastfeeding.

6.3 Recognition of ways to enhance scientific, cultural and civic domains of health literacy of clients and the public

Practitioners offered a number of examples of their efforts to promote breastfeeding which reflected the application of different ways of knowing about breastfeeding. In this section, I explore whether and how informants recognized and identified ways in their practice to advance health literacy which reflect these multiple domains of health literacy—specifically scientific, cultural and civic literacy. I begin with scientific literacy.

6.3.1 Enhancing scientific literacy as part of health literacy

My examination of practitioners' talk suggested that their practices did not reflect strategies aimed at enhancing scientific literacy as a dimension of health literacy. While some practitioners appeared to assume that clients and the public may have the ability to understand scientific concepts, others suggested that they did not or may not be interested in information drawing on scientific concepts and understandings (see section 6.2.2.1, p.281).

Although practitioners appeared to draw upon scientific concepts and terminology associated with lactation, when providing information about breastfeeding to their clients (see section 6.2.2.1, p.281), there was little evidence that they directed efforts towards enhancing the scientific literacy of their clients. Scientific literacy may not be considered an asset as part of health literacy or they may not see the relevance of scientific literacy to their promotion of breastfeeding. As mentioned in the previous chapter (see section 5.2.1.1, p.223), descriptions of their practice reflected their tendency to use persuasive arguments in support of breastfeeding at the expense of providing impartial factual information comparing feeding options. While practitioners frequently talked about telling clients about the benefits of breastfeeding, they did not explicitly mention applying the concept of risk in comparing the health benefits of breastfeeding and bottle feeding. This finding is somewhat surprising given the prevalent application of the concept of risk as a motivational strategy in health education interventions directed toward individual behaviour change (Glanz 2002).

According to Knaak (2006), providing impartial information to women on the comparable risks associated with infant feeding methods is an imperative. Findings from this study do not support Lee's (2007) claim that messages directed to Canadian and American women, like women in England where she examined mothers feeding practices, prominently referred to the risks associated with bottle-feeding.

This comment from a public health nurse suggested that talking to clients about infant feeding methods using the concept of risk is the exception, not the rule. She described one occasion when she took her prenatal class to a lecture on the risks associated with feeding options:

[It was]presented by a lactation consultant from the States who spent her 30 year career promoting and supporting breastfeeding, looking at the risks of not breastfeeding, the risks of bottle feeding. I am not sure which way it was and we were able to take a prenatal class to that session. It was very interesting and I have used information from that in classes and one-to-one from time to time and just again raising awareness about some of these potentials in terms of bottle feeding. (P9, 269)

While this public health nurse referred to occasionally using this information pertaining to risk in communications with clients, she contended that applying the concept of risk was not entrenched in her practice. Furthermore, comparing feeding methods according to infant health risks appeared to be used for encouraging women to breastfeed, not necessarily to enable them to make a balanced and informed feeding choice based on scientific evidence. There was no suggestion that enhancing the scientific literacy of clients, such as by increasing their understanding of scientific concepts and arguments relevant to feeding options, was a central concern.

Similarly, there was little evidence of efforts to enhance the scientific literacy of the public as part of efforts to increase public awareness and support for breastfeeding. A dietitian advocated providing the public with information comparing breast milk and formula using scientifically based evidence about the health consequences of feeding methods. In this case, the health promotion strategy she recommended assumed that members of the public have an adequate level of scientific literacy to understand this information. As she said:

It [breastfeeding] is above formula. Getting that message across in a way that is going to educate a lot of people, not just in simple language, in benefits or statistics that show that these babies have less problems with ear infections. These babies have less problems with allergies—showing the real positive benefits. (P25, 266)

There is no sign that the practitioner had taken into account whether the level of scientific literacy of members of the audience enabled them to understand epidemiological facts and arguments underpinning the message. Moreover, no attention was given to the audience's ability to appraise the information for impartiality or scientific merit.

Whereas the above practitioner proposed a communication strategy which assumed that the public had adequate understanding of scientific concepts to grasp messages, other practitioners suggested that people in their communities did not want scientifically based arguments. One public health nurse contended that people in her community did not understand scientific terms and, furthermore, were not interested in the presentation of scientific justifications on debatable issues. She argued:

Reliable, simple information, like people out there don't want the debate between you get these nutritional elements if you breastfeed and you don't, because they don't understand scientific, they need to know there are things lacking over here, that aren't over here, but they don't need it in the scientific terms, because that doesn't ring through to them. (P.12, 303)

This comment suggests that people do not have the level of scientific literacy or interest needed to understand scientific arguments or terminology. Furthermore, this practitioner appeared to see no value in presenting scientific concepts or evidence underpinning the feeding advice and information she gave. In this case, scientific literacy appears to be the privilege of the one providing the information—the health professional. This viewpoint is not consistent with the

notion of health literacy that Zarcadoolas, Pleasant and Greer present. They suggest that drawing upon scientific literacy is an essential aspect of being health literate.

As practitioners described their breastfeeding promotion practices, there appeared to be little recognition of ways to enhance the scientific component of health literacy to either clients or the public. Next, I examine the extent to which practitioners' description of practices reflected ways of enhancing cultural literacy as part of health literacy in promoting breastfeeding.

6.3.2 Enhancing cultural literacy as a part of health literacy

As a dimension of health literacy, the notion of cultural literacy places priority on the context in which the communication occurs. Zarcadoolas, Pleasant and Greer (2006) suggested that it was important that the socio-cultural context was recognized by both those who are intended to understand the health message and practitioners as they situate the message. Attention to cultural literacy as a domain of health literacy calls for "recognition and skill on the communicator's part to frame health information to accommodate powerful cultural understandings of health information, science and individual and collective action" (Kreps and Kunitomo, 1994 as cited in Zarcadoolas, Pleasant and Greer 2005, p. 197). Zarcadoolas, Pleasant and Greer stressed the idea that "cultural literacy should be lateral" (2006, p.57), meaning that communicators should understand the culture of the recipients and likewise, recipients should understand aspects of the professional culture of the sender.

While there was little reflection in practitioners' talk of ways to advance the cultural literacy of their clients, there was some evidence of practitioners' incorporation of elements of their own cultural literacy as they took on efforts to promote breastfeeding. Some of their comments referred to practices directed to individuals; others referred to practices aimed at increasing greater public awareness and community acceptance of breastfeeding. I begin by addressing those directed at individuals.

Some practitioners talked to their clients about ways to overcome socio-cultural barriers to breastfeeding. For example, one public health nurse referred to her own experience in overcoming these barriers. She said that she told expectant mothers that she had breastfed her babies in public without concern:

I'll often say to them 'I have fed my children everywhere without exception whether it was the middle of McDonalds or an upscale restaurant. ...I was comfortable with who I was and what I was doing but that's a big gap for a lot of people to be that confident in what you're doing that you can do it wherever you need to. And I mean you can be so discreet that nobody knows, for example in church.' (P21, 232)

While recognizing that many women found it difficult to breastfeed in public, she suggested that it could be done discreetly and implied that if she could to do it, others could as well. Of course, this assertion does not recognize that the experience of breastfeeding is markedly different among women (Maclean 1990; Murphy 2004; Schmied and Lupton 2001). Not all women may perceive themselves as public breastfeeders, especially if breastfeeding is frowned upon in their social setting. Zarcadoolas, Pleasant and Greer (2006) suggested that cultural literacy can contribute to an understanding of how people identify themselves and with whom they identify in terms of values, perceptions and actions. The above public health nurse's approach reflected her effort to persuade women to

breastfeed discreetly in public. The responsibility was placed on the mother to accommodate her feeding practices in ways that are socially acceptable. The nurse's comment did not reflect the enhancement of cultural literacy as a domain of health literacy as Zarcadoolas and colleagues have described it.

Practitioners frequently referred to the need to direct efforts to increase public awareness and community acceptance of breastfeeding. Their suggestions of breastfeeding promotion strategies which could be directed to the public reflects incorporation of their understandings of the socio-cultural context in which breastfeeding is situated. One public health nutritionist suggested that efforts should be directed not only to informing women about the benefits of breastfeeding but also to changing cultural beliefs and, ultimately, fostering public support for breastfeeding:

I think if we could start with OK they understand the information and they use it, then that is going to cause more people to breastfeed hopefully and it kind of helps to change the culture of that too right. Culture, but then I think it is not only for the women that are breastfeeding but it's when we look at it culturally, it is for the broad public and creating that understanding among men around breastfeeding so they can support women. (P2, 415)

Her comment suggested that cultural literacy had implications for creating more socially supportive environments for breastfeeding in contrast to accommodating cultural sensitivities or perpetuating cultural beliefs about breastfeeding of community members.

Several practitioners talked about a plain language poster produced and widely distributed throughout the district by the Breastfeeding Committee. The poster simply showed a photo of a mother with a baby at her breast discreetly feeding. It

was accompanied by a one page pamphlet with agency contact information. As one practitioner who was a member of the Breastfeeding Committee suggested, the poster was intended to make people feel more comfortable seeing a woman breastfeed:

What our goals are right now is, one, just to get communities comfortable with breastfeeding. That's part of the point of the breastfeeding poster. If you just put enough of them in enough places, people are going to get used to looking at that picture and it's not going to seem strange to see it. (P1, 188)

This strategy was undertaken in recognition of local sensitivities about breastfeeding and was aimed at increasing public acceptance of breastfeeding. This example reflected an effort to enhance cultural literacy for the client and also for the public on breastfeeding. The fact that copies posted in the hospital were repeatedly removed and reposted affirms the discomfort some individuals had in seeing a woman nursing a baby. This point was raised repeatedly at meetings of the Breastfeeding Committee which I attended. No other reasons for their removal were suggested by practitioners when directly asked.

A dietitian also talked about the need for increasing public awareness of breastfeeding using mass media. She argued for delivering factual information on the benefits of breastfeeding in a way that was consistent with cultural beliefs which would avoid offending the audience. As she argued:

If Health Canada or the provincial government was to do some mass media... The biggest thing I think is showing the biggest benefits. But not necessarily, I think some people just get turned off if they see a women breastfeeding, 'oh I am not going to do that'. So you have to get around that part with some of the ads at least. Not showing the baby latched on because I do think that does turn some people off. They see that and they won't look at the ad... (P25, 266).

In this instance, elements of cultural literacy are applied in proposing a social marketing strategy to increase public acceptance for breastfeeding in a manner that acknowledges public discomfort with respect to exposing the breast. On the one hand, her approach reflects respect for the cultural sensitivities related to public display of breasts. On the other hand, it avoids challenging cultural norms by advising that the ad should not depict nursing women displaying their breasts.

Practitioners talked about how First Nations women tended to share information with each other through their social networks and through ways of knowing which placed less emphasis on advice from experts (see section 5.4.3.2, p.269). A health centre coordinator described how her awareness of the importance First Nations women placed on social interaction had influenced the development of the prenatal education programme and other health promotion activities in her community:

We realized that prenatal classes worked a lot better when you included a social aspect to them and [with] that social aspect we got more out of it than just educating them in prenatal classes. Then we got a better understanding of what more they wanted, what more things they thought would be good topics to cover. So it then kind of snowballed into the rest of our ... health programmes. (P17, 378)

She also pointed to the value of having opportunities to share cross cultural understandings with others practitioners. She said, *“It’s kind of nice that I’m in on some of the conversations and I’m kind of hoping that some of the things that we do we can learn from them as well and they can learn from us”* (P17, 483). Her comment reflects an understanding that there are cultural differences between her community and non-Aboriginal communities in the ways practitioners approach their practice. She was of the opinion that practitioners can learn from each other.

This comment reflects a way to enhance cultural literacy as a domain of practitioners' health literacy.

A public health nurse suggested that all cultural groups in the district have been affected by the lack of public policy supporting breastfeeding over the last century. She suggested that efforts could be directed to bringing women from these different cultures together as a means of promoting and supporting breastfeeding in the district:

I guess the breastfeeding issue, it's just one of things that cross so many different cultures and so many women and families have suffered because of the policies of government or institutions. And I think that you know based on our local GASHA area, the fact that we have Aboriginal people, and Scottish people and French people and we have the Black culture. It's one of those issues that so many women can relate to regardless of what culture they are from. And I think that's a tremendously positive thing. One way that maybe we haven't tapped into to bring people together and recognize that we have all suffered because of it. And it crosses all those cultural lines in the last 50 to 100 years. (P30, 302)

Her comment suggests addressing the issue of breastfeeding in a way that directly draws upon the collective cultural understandings of women. Her proposed strategy was to involve women in exploring the cultural influences on breastfeeding. It reflected an intention to enhance cultural literacy as a component of the health literacy of women from various cultural groups within the district.

In summary, although practitioners in this study incorporated elements of cultural literacy in their breastfeeding promotion efforts directed to individuals and communities, their current practices did not appear to be predominantly directed to actively trying to enhance individual and community cultural literacy as a component of health literacy.

6.3.3 Enhancing civic literacy as part of health literacy

“Civic literacy refers to abilities that enable citizens to become aware of health issues through civic and social channels and become involved in the decision-making process” (Zarcadoolas, Pleasant and Greer, 2006 p.61). There is some evidence within these practitioners’ description of their practices that reflect ways in which they try to enable citizens to become aware of breastfeeding through civic channels and civic involvement in decision-making.

Civic literacy as a domain of health literacy was reflected in efforts of the Breastfeeding Committee—a committee composed of practitioners from various disciplines and sectors. Practitioners appeared to apply their knowledge of relevant civic networks to gain support for breastfeeding as a population health issue. A Breastfeeding Committee representative was selected to sit on the Community Health Board to inform the Board of efforts to address the low prevalence of breastfeeding, a situation considered to be a community health concern. The Committee provided advice on this issue in the formation of district health plans and priorities of the District Health Board. This Board is responsible for allocating funds to support health services and programmes. A member of the Breastfeeding Committee claimed that strategies were needed to enable greater involvement of citizens in setting directions for improving breastfeeding initiation and duration rates across the district:

.. we’re thinking we need more focus groups and more meetings to be held in different areas to get more of a broader view within GASHA. ...I don’t think the Breastfeeding Committee really knows what they need to address ... ultimately we all want mothers to breastfeed and we all want the duration to be longer than what it is and it has more to do with just having a healthy population in general. (P17, 259)

She emphasized using participatory methods to engage women in informing the Committee on ways to increase breastfeeding initiation and duration. Her comment suggested a way to enhance mothers' civic literacy through their participation in determining future directions for action by the Breastfeeding Committee.

One public health nurse claimed that breastfeeding is not just an issue that pertains to women, but one that needs to be addressed through the collaboration of community groups:

I think breastfeeding and a healthy start to life are all part of health promotion. I think that by building better partnerships in our community we can do that with more people so that it becomes a community concern not just a woman's concern. (P21, 360)

These comments suggested an understanding that responsibility for enabling mothers to breastfeed rests not only with individual mothers or practitioners but, rather, across many sectors and among many stakeholders. This call for community collaboration advocated a collective response to the issue of low breastfeeding rather than an individualized approach for the transmission of information to mothers in an effort to influence feeding choice.

Another perspective on civic literacy is reflected in an account of advocacy communication reported by one CPNP coordinator. When a mother was asked not to breastfeed in a local restaurant, peers participating in the CPNP morning drop-in programme organized a protest through letter writing and a boycott of the restaurant. The CPNP coordinator said that she was supportive of their efforts and facilitated their discussion on what actions to take. The notion of civic health literacy as it pertains to supporting a mother's right to breastfeed in public is

reflected in the following CPNP coordinator's comment: *"Everybody has a responsibility I guess to inform the community about the benefits and about workplace and about going to wherever, shopping or to a restaurant, that you have the right to breastfeed your baby"* (P4, 290). She contended that community members and agencies—in this case local businesses and employers—must protect the rights of the mother to breastfeed in public and that citizens have a responsibility to make them aware of these rights. This account was a unique example of an effort to support the development of mothers' civic literacy skills in order to challenge structural barriers to breastfeeding in public.

In summary, as these diverse examples suggest, practitioners appeared to be aware of channels through which they could advance breastfeeding as a population health issue and garner greater community support for breastfeeding in this district. Their descriptions reflected a sense of collaboration among local agencies, especially through the Breastfeeding Committee and their understandings of local systems of decision making. Examples illustrating ways in which practitioners worked through various civic networks suggested that some practitioners were involved in building social capital to address the issue of breastfeeding. Zarcadoolas, Pleasant and Greer suggested that social capital is an important aspect of civic literacy and one that can contribute to health literacy⁵¹.

In this section, I have examined the extent to which practitioners' talk reflects ways in which they engage in breastfeeding promotion practices that enhance multiple domains of health literacy. Although there were ample examples of ways

⁵¹ Social capital is defined as the *"resources embedded in social relations among persons and organizations that facilitate cooperation and collaboration in communities"* (Putnam, 2000 as cited in Zarcadoolas, Pleasant and Greer 2006, p.62).

in which practitioners could incorporate notions of multiple literacies in their breastfeeding promotion efforts, there were few reports of practices reflecting ways in which they attempted to enhance scientific, cultural or civic dimensions of health literacy of clients or the public. Even though practitioners reported frequently using scientific terms and concepts in communicating information about breastfeeding, it is striking how limited were their accounts of practices reflecting ways to advance scientific knowledge of breastfeeding. Indeed there is some indication that practitioners believe that clients are not interested in applying scientific concepts in the information they receive about breastfeeding. The lack of examples of practices reflecting ways to enhance cultural and civic literacies as domains of health literacy may reflect the priority given to individual rather than community-level breastfeeding promotion efforts. Next, I turn to examining the extent to which practitioners' talk reflects tensions and contradictions concerning these multiple domains of health literacy.

6.4 Tensions and contradictions related to the multiple domains of health literacy

Zarcadoolas, Pleasant and Greer claimed that being health literate enables one to draw upon various literacies as they "seek out, comprehend, evaluate, and use health information and concepts to make informed choices to reduce health risks, and increase quality of life" (2006, p.76). Of course, advice derived from different ways of knowing may be at odds with each other as they pertain to a particular health issue such as infant feeding. I now examine the extent to which practitioners' talk reflects tensions and contradictions related to multiple dimensions of health literacy. I begin by looking at tensions which reflect the

convergence of scientific and cultural literacies in the provision of breastfeeding information.

6.4.1 The interface of scientific and cultural dimensions of health literacy

The extent to which practitioners' descriptions of their breastfeeding promotion practices reflect the interplay and frequent strain between scientific and cultural literacies as dimensions of health literacy is notable. Breastfeeding can be thought of as both a recommended health practice based on scientific evidence and a culturally embedded behaviour. As pointed out in Chapter 2 (see section 2.3.1, p.71), infant feeding advice is influenced by both scientific arguments as well as socio-economic and cultural understandings of what is the best way to feed a baby (Apple 1995; Hausman 2003; Ostry 2006a).

In talking about what influences mothers' feeding decisions, one primary health nurse was of the opinion that women essentially have two different ways of knowing how to feed their babies. She suggested that while some mothers seek out factual information, others learn from those around them and model their practices:

What do people [think about breastfeeding], particularly their husbands and even in their families, especially if their mother breastfed or not? I think it has a huge impact on whether or not, first of all culturally [they] believe in that kind of thing. So experience is one thing. Also good information, some of them don't have the proper information because they only know what they learnt. They don't know what the evidence really necessarily says. Some mothers are well informed... able to access that kind of information. (P29, 30)

She suggested that mothers, first and foremost, tap experiential knowledge and beliefs of family members that tend to reflect cultural norms—norms that may not be consistent with current scientific evidence about what is the best way to feed a

baby. She pointed out the difficulty that mothers face in weighing information from indigenous versus scientific-based evidence in determining the best way to feed her baby:

If you have grown up in a culture that has never done it then you have the pressure not to do it [breastfeed] but then you have this new evidence that suggests that it [breastfeeding] is best, then you are really caught between the two. (P29, 194)

This second comment suggests that mothers require the ability to discern what information derived from these two ways of knowing is most relevant to making an informed choice.

Practitioners made very little mention of how they can enable mothers to draw upon scientific and cultural understandings in a way that addresses contradictions in advice. This finding is consistent with the lack of evidence of reported efforts to enhance mothers' skills in critical appraisal of information as noted in the previous chapter (see section 5.3.2, p.245).

Practitioners, however, frequently mentioned their concern about the delivery of inconsistent and contradictory advice to mothers on how to feed their babies (see section 5.4.1, p.251). Many talked about this as a major problem and described efforts taken to address it. One maternity nurse said, *“now since the majority of us have taken the 18 hour course, we are more consistent in our approach and what we are saying”* (P3, 451). Despite such efforts, many practitioners pointed to the lack of consistency in feeding advice given to women from different practitioners as an ongoing problem. Another maternity nurse said that *“you have to have all of your health care workers on the same page because these women are depending on you for answers and if they are getting conflicting information; if we are*

conflicted, they are conflicted to beyond” (P28, 352). In a similar vein, a public health nurse emphasized the need for practitioners to deliver consistent advice to their clients: *“It’s a part of health literacy and I think it’s a part of professional confusion. I think we need to be all educated from the same book”* (P12, 263). The focus on enabling practitioners to deliver a standard message reflects the priority given to the transmission of information to women noted in the last chapter (see section 5.4.1.1, p.256).

The emphasis practitioners placed on consistency in the provision of infant feeding information assumed that there is an unequivocal message that could be derived from the scientific literature about breastfeeding. Furthermore, it assumed that all practitioners would ascribe to it. However, as one public health nurse suggested, practitioners are likely to have different views about infant feeding. She said, *“we have the privilege of more education, we realize that there are so many ways of looking at things in the world and that things most often are not black and white”* (P9, 221). Her comment suggested that there may be more than one right message about how to feed a baby. A LLL leader’s description of the contradictory advice given by two organizations about Vitamin D supplementation lends support to the idea that there may be more than one way to interpret scientific evidence, as follows:

The Canadian Paediatric Society is currently recommending that all breastfed babies be receiving supplementation. La Leche League doesn’t support that. We believe that Vitamin D deficiency is a sunlight deficiency and that by exposing, under safe conditions, exposing your child to sunlight should be giving them sufficient and there is no problem with breastfeeding. I give them the appropriate references in doing that but then I will say, but this is your child, you have to make the decision that you feel comfortable with between these two sets of research. (P5, 193)

Whereas the above example reflects the appearance of conflicting advice based on scientific evidence, practitioners also described how knowledge derived from different literacies may contribute to a lack of consistency in infant feeding information provided to mothers. For instance, one maternity nurse attributed the lack of congruence in information to the fact that some nurses who bottle fed their babies may not be knowledgeable about breastfeeding or, as she implied, convinced of its benefits over bottle feeding:

I think they are still getting different messages from different practitioners. I think part of that comes from the practitioners, if you look at the age of the nurses that are out there, a great number of them were bottle fed themselves, raised in a generation of bottle-feeding and have seen a generation of bottle fed babies that are a relatively healthy population.
(P1, 232)

Her comment speaks to the clash between scientific and cultural ways of knowing about infant feeding. Practitioners professionally trained to promote and support breastfeeding may not adhere to scientifically informed beliefs which deviate from knowledge derived from their personal experience as mothers and what was considered appropriate feeding practice at that time. This observation adds evidence of an underlying strain between scientifically based recommendations and personal beliefs—a conflict consistent with reports reflecting tensions between scientific and experiential knowledge raised in the previous chapter (see section 5.4.3, p.266). It also speaks to the changes in scientific evidence underpinning feeding advice directed to mothers over time, as seen next.

In speaking of her first-hand experience as a breastfeeding mother, a CPNP peer leader attributed conflicting advice which she and her peers have received to dated scientific recommendations and personal beliefs about feeding babies.

They [practitioners] may be reading outdated information, information from the US. Things are similar but different in a lot of ways. I would say

some of the nurses may have their own ideas of the right way to do it or the wrong way, what is normal and what is not normal. (P8, 448)

Zarcadoolas and colleagues (2006) have suggested that an element of scientific literacy is the recognition that rapid change is possible in science. As this CPNP peer leader suggested, infant feeding advice changes quickly and practitioners may not be keeping up to date. In a follow-up comment, she again referred to inconsistencies in advice that mothers receive. Here, recommendations about breastfeeding duration was a case in point for her:

...the material they (practitioners) are reading would have to be current or fairly new because it is changing almost every year. You hear different information on the duration and such. (P8, 452)

In spite of efforts to standardize feeding advice across government agencies, professional associations and other authoritative bodies, there is a suggestion that practitioners may not be providing information based on current recommendations. During this study, the province adopted a policy recommending that mothers exclusively breastfeed for six months (see section 3.4.2.2.2, p.124). A hospital dietitian reported that she was not familiar with the new policy as she talked about trends in advice related to weaning. As she reported:

Well gosh, years ago they fed at three weeks which is beyond, cereal at 3 weeks and then a bottle and then 3 months and 4 months and now we are saying 6 months without anything else. I don't know, I have questions about that but I don't deal with it so I have not taken the time to read more about it. I am sure it will be fine if the health department is promoting it. I would have to go along with it. (P25, 122)

This example suggests that the health literacy level of practitioners may influence the currency and consistency of feeding information provided to mothers.

Hausman (2003) claimed that women routinely made decisions based on misconceptions and she referred to the “culture of misinformation that surrounds

infant feeding” (p. 2). She said that not enough attention has been paid by practitioners to mothers’ ability to respond to the wide array of mixed infant feeding messages to which they are exposed. Other authors have pointed out that infant feeding information directed to mothers is subject to constant change—reflecting not only emerging scientific evidence but also social trends and cultural influences. (Ostry 2006a; Wolf 2003). Next, I look at the importance of framing breastfeeding information within the socio-cultural context in which mothers are likely to apply it.

6.4.2 The importance of context in situating messages

Findings from this study suggest that there is a considerable strain between scientific and cultural literacy concerning breastfeeding. It may be difficult to situate infant feeding advice based on scientific evidence within the context of women’s lives. For example, international breastfeeding guidelines are unlikely to reflect the dramatically different socio-cultural contexts which determine the extent to which mothers can access, understand and use information provided. The World Health Organization (WHO) sets recommendations which are subsequently adopted by national and provincial/territorial jurisdictions. These recommendations, in turn, shape district policies and ultimately the advice provided to women in their communities. Certain recommendations, even though they are based on scientific evidence, may have more relevance in one socio-cultural context than another.

A nutritionist with international experience in breastfeeding policy described the challenge in contextualizing notions of risks associated with infant feeding options

and in communicating breastfeeding information in different parts of the world. He described how the context in which infant feeding decisions are made by women in a Canadian health district differed greatly from situations in developing countries where the choice of feeding method was closely linked to the risk of serious illness. He referred specifically to examples where it was critical that women be informed of the significance and consequences of their feeding choices with respect to the likelihood of their infant contracting human immunodeficiency virus (HIV):

So mothers should be aware of what the actual risks are, what the magnitude of the risk is. She has to make a decision based on the risks.....the benefits and the cost. And those costs have to be measurable and understood. The magnitude has to be understood and that is really a challenge. (P10, 187)

His comment implies that applying the notion of risk demands an appreciation of scientific uncertainty within the socio-economic and cultural context in which information about risk is situated. The concept of risk can be considered of a different scale in communities in Nova Scotia where there is less risk of infants contracting HIV or other acute life-threatening illnesses related to the feeding method, than in a developing country. As he pointed out, bottle-fed babies in Canada “*may have greater risk of allergies or they may suffer some barely perceptible cognitive deficit in the long term; albeit more likely to suffer from some chronic disease in the future but these are not things that are perceptible to mothers now*” (P10, 134). Because health risks associated with the choice of infant feeding methods are less obvious in Canada than in developing countries, practitioners face different challenges in communicating the nature of risk to Canadian women regarding their feeding options. He suggested that promoting breastfeeding is more difficult in a Canadian health district, such as the site of this

study, because risks of not breastfeeding are not so pronounced as in developing countries. As he explained:

That challenge is more significant here [in this health district] because the difference between functional consequences of optimal and sub-optimal behaviour are smaller. So it is a question of how to communicate the magnitude of the functional consequences in such a way that is credible and therefore does not undermine our message by seeming ridiculous. (P10, 209)

Knaak argued for greater communication of “the various statistics of risks and benefits associated with formula and breastfeeding” (2006, p.413) and asserted that this information must be framed within the Canadian context. Furthermore, she suggested that safety margins should be articulated and that the relative health impacts of feeding should be placed within the broader context of risk. Her suggestions assume a level of scientific literacy among expectant and new mothers in order to appraise information. They also assume that there is a willingness among practitioners to present these scientifically derived arguments to their clients with a consideration for their clients’ level of scientific literacy. One LLL lay leader suggested that advanced literacy skills are needed in order for women to assess the risks of not-breastfeeding.

I think there needs to be a certain ability to synthesize the information out there in order to make a truly informed decision. I think that the majority of women who make the decision are not making it as a truly informed decision. They’re not fully aware of all the risks of bottle feeding, feeding artificial baby milk versus using feeding at the breast. (P5,365)

As mentioned earlier, few practitioners described practices in which they applied the concept of risk in informing mothers about the comparative advantages and disadvantages of breastfeeding and bottle feeding. Perhaps practitioners recognized the challenge in applying the notion of risk in a way that will convince mothers that breastfeeding within their socio-cultural context is indeed a healthier choice for their babies and an appropriate choice for themselves.

6.4.3 Tensions between an expert-driven medical model and a public health approach

Appearing throughout practitioners' description of their breastfeeding promotion practices was an undercurrent of tension between models of practice, i.e. the medical model versus the public health model. The promotion and support of breastfeeding is primarily a public health, not an illness, issue. In the health district in which this case study was undertaken, however, priority appeared to be placed on ways of practice which were more consistent with a medical model. For example, the hospital based perinatal clinic was created as a centre for breastfeeding information. Mothers throughout the large district were expected to go to there before and after birth for breastfeeding information and support. Maternity nurses were being trained as lactation consultants to work out of the perinatal clinic. Moreover, practitioners frequently pointed to the heavy reliance by women on their physicians for feeding advice.

According to many practitioners, physicians' support of breastfeeding was essential because they had contact with women early in their pregnancy and mothers turned to them for authoritative advice because of their medical expertise. Many practitioners, however, suggested that even though physicians were considered an influential source of information by mothers, few were well informed about breastfeeding. In speaking of his colleagues, one family physician said, *"most of the doctors I don't think know about breastfeeding and know what to do... when someone comes in with a breastfeeding problem they tell them to bottle feed"* (P18, 9). Another physician said, *"I can't imagine a family doctor not encouraging someone to breastfeed although I have heard that it does happen"* (P19, 179). One public health nurse said, *"They [mothers] expect their*

physicians to provide the answers if there is something wrong; as far as actual support if they're having trouble breastfeeding I really don't think they'd see the physicians as being knowledgeable” (P21, 196).

So while physicians may be seen as the authoritative voice on health—and in a more particular way—disease issues, physicians were not seen to have knowledge of breastfeeding. There is some support for this claim in the literature. Based on his historical analysis of breastfeeding information practices in Canada, Ostry (2006a) claimed that during the last century the federal government’s authority in the provision of infant feeding advice was displaced by the authority of physicians even though most have not shown much interest or support for breastfeeding (see section 2.3.1, p.71).

Several practitioners complained that, in addition to not being informed or supportive of breastfeeding, physicians were unlikely to refer mothers to other practitioners for breastfeeding information and support. One maternity nurse said, *“Not all GP’s [general practitioners] send a referral to the perinatal [clinic]”* (P3, 59). A rural- based public health nurse said that pregnant women *“end up going to their family doctor first, and the family doctor sees them and there is no referral that comes out (P24,66).* Later in the interview, she said that physicians were, *“leaving it to the woman to do the referral, so I am not even sure if they have a conversation with them in the office to say you should call or go see whoever”* (P24,74). A medical specialist agreed that physicians were reluctant to refer to other practitioners as she said, *“ I think it’s threatening because there’s been a very traditional view about medical practitioners that patients quote*

belong to medical practitioners and everything else is ancillary” (P27, 125). The above comments reflect concern about the dominance of an expert model of medical practice on breastfeeding promotion practices in this district.

Whereas medical practitioners emphasized the importance of mothers accessing medically trained experts in breastfeeding, community-based practitioners were more inclined to see the value of shared experiential knowledge. Some public health and CPNP coordinators were reluctant to identify themselves as breastfeeding experts, yet they recognized breastfeeding experience—their own and that of other mothers—as an important and influential source of knowledge to mothers (see section 5.4.3.2, p.269). Zarcadoolas, Pleasant and Greer (2006) contended that an expert-driven approach was not likely to be effective because it perpetuates power differentials. There was little mention in practitioners’ talk about power relations and little evidence of efforts to challenge institutional policies or structural barriers to breastfeeding. This gap is not surprising given the lack of evidence of reported practices which address socio-cultural and economic constraints to breastfeeding. Practitioners had little to say which reflected an emancipatory approach to critical health literacy as proposed in Nutbeam’s model (see section 5.3.2, p.245).

Zarcadoolas and colleagues argued that applying an expert medical model, which gives priority to scientifically derived medical knowledge, was not an appropriate health literacy approach in addressing complex public health issues. They challenged approaches to health literacy which cling to an expert model, arguing instead for an approach which includes the ability “to understand scientific

concepts, content, and health research; skills in spoken, written, and online communication; critical interpretation of mass media messages; navigating complex systems of health care and governance; and knowledge and use of community capital and resources as well as using cultural and indigenous knowledge in health decision making” (2006, pp.52-53). This approach reflects the contribution of multiple domains of literacies to health literacy. An expert approach drawing from a scientific way of knowing strives for consistency in information based on the assumption that there is one reality. The provision of information based on the assumption of one reality does not appear to be compatible with practices addressing complex issues such as infant feeding which reflect different ways of knowing including cultural and civic literacies as well as scientific literacy as dimensions of health literacy.

Findings from this study highlighted the tensions between expert and public health models of practice. Practitioners from across the perinatal continuum of care appeared to give priority to different ways of knowing as they talked about engaging in practices aimed at increasing breastfeeding initiation and duration rates in this district. One of the contributions of this study is the exposure of tensions in practitioners’ talk which reflect, in large part, the friction between medical and public health approaches to health literacy practice.

6.4.4 Recognition that change is needed

Practitioners’ talk suggested that their current model of practice may not be working. Comments made by practitioners who participated in two focus group interviews pointed to the need not only for a change in how they approach their

practice but also a need for organizational change in the system within which they were undertaking their breastfeeding promotion efforts. The following comment made during a focus group interview challenged current ways of practices which were said to be dominated by a medical model.

I think the way we actually approach this whole thing, we do it from the health care kind of thing, model which is not obviously working terribly well. The way we provide the education around breastfeeding, the classes, written material, options, not enough one on one time, so the whole method of delivering is not good enough but our budgets and things are determined on the basis of doing people in groups and classes and using our print material and video and things so our whole framework has to change if you think that you have to take this concept [health literacy] into consideration. (Practitioner Focus Group 2, p 10)

Although practitioners suggested that there was a need for both organizational and practice change, they pointed to significant human resource and financial implications in redirecting their practices away from information provision to practices more reflective of interactive health literacy. As one said:

Implications for physicians and practitioners so they know what their role is and do they have the skills, this whole business of pushing things (information) versus maintaining relationships, the need to educate people around that, that sort of thing. I think there are lots of implications that would translate into practice. There may be major financial implications too. (Practitioner Focus Group 2, p 11)

Even though practitioners recognized that they may be constrained by the current system in which they promoted breastfeeding, they suggested that incorporating dimensions of health literacy into their breastfeeding promotion practice might be useful to them. As one participant said: “*So I think the [health literacy] framework is very useful if you ever plan on sharing that. It helped me look at something differently*” (Practitioner Focus Group 1, p.10). There was a sense among practitioners that change was needed, and that application of notions of health literacy to their breastfeeding promotion practices offered a promising approach.

In summary, this examination of practitioners' descriptions of their practices suggests that practitioners encountered tensions related to multiple domains of health literacy in their efforts to promote breastfeeding to individuals and the public. Practitioners' concern about the lack of consistency in breastfeeding information provided to mothers pointed to contradictions between different ways of knowing, in particular between scientific and cultural literacies as domains of health literacy. Efforts undertaken to increase consistency of advice through the education of practitioners appeared to be based on the assumption of one reality and that consistent advice could in fact be provided to mothers. These efforts reflected an emphasis on the transmission of information, not on enabling mothers to develop capacity in health literacy in order to access, understand, evaluate and use information drawn from different ways of knowing about breastfeeding. Practitioners' descriptions of their breastfeeding promotion practices also suggested tensions between competing approaches to practice, i.e. a medical model of health literacy which reflects the privileging of scientific knowledge and a public health model of health literacy integrating various ways of knowing. There is evidence that practitioners recognized that current practices are not working well, that incorporating notions of health literacy has implications for their practice, and that organizational change is necessary to enable a shift in their practice.

6.5 Multiple understandings: so what does health literacy mean?

During my interviews with practitioners about their breastfeeding promotion practices, participants often became engaged in reflecting on the idea of health literacy—a concept that few appeared to have given much thought to before this

occasion. At the end of each interview I asked the practitioner, ‘so what does health literacy mean?’ The following sampling of their responses reveals the diversity in their notions of health literacy.

I think we kind of have to start at the bottom or ...the basics form, that is, trying to get the information out there in the simplest way that we can so it is accessible for everyone not just people that can read.(P26, 690) CPNP Coordinator

I think it means education, knowledge and the ability to get it. (P18, 233) Physician

I think knowing where to turn and how to use this information and if you don’t know how to use this information, who do you have to ask to answer your questions. (P20, 242) LLL leader

I guess health literacy as it relates to breastfeeding is the ability to provide and I’m not even going to say pregnant women because I think it’s bigger than that, I think it’s to provide the population in general with information that enables them to make the right choice. When I say that, the right choice is that I’d like to see everybody breastfeeding but we need to normalize breastfeeding -- that needs to become the norm. (P12, 299) Public health nurse

It is what they receive, it is not what we teach and our job is to make sure that they receive the right stuff and the stuff that they need because every client has different needs as well. (P22, 274) Medical specialist

So health literacy... sitting around and learning from mothers and doing whatever is your way of learning (P4, 559) CPNP coordinator

Helping parents really understand and be able to be informed about a topic well enough so that they feel that they can do it if that’s what they want to do and the support is there after to help them breastfeed their baby if they’ve made that decision. (P16, 425) Public health nurse

Health literacy-- that lens helps clarify the challenge. It is a matter, largely a matter of information. Even the other things, the other factors, the non-informational things, the cultural momentum, the various bits and pieces of other influences are subject to informational change. Literacy can address those as well depending on how broadly you define health literacy. (P10, 195) Nutritionist/policy analyst

Their responses reflected health literacy as a property of individuals which can enable them to access, understand and use information about breastfeeding.

However their comments also reflected a broader notion of health literacy as it pertains to the interaction of individuals with the system. In particular, it revealed that they saw themselves as agents of the system through which breastfeeding information is provided. Some of their comments about health literacy also extended to the socio-cultural context in which information is provided and used.

My examination of descriptions of breastfeeding promotion practices over these last three chapters has revealed no universal or shared understanding of health literacy among practitioners in this study. This lack of consensus parallels discussion in the literature. Understandings of health literacy are diverse and definitions debatable. Tensions embedded in practitioners' descriptions of their practices reflected different aspects of health literacy found in the current literature. Competing models of practice exist in both worlds—in practice, as seen in this study, and in the literature.

6.6 Summary and conclusion

Although their descriptions reflected ways in which practitioners drew upon multiple domains of health literacy in their breastfeeding promotion practices, there is little evidence of specific ways in which practitioners enhance scientific, cultural or civic literacy of their clients or the public. Even though practitioners talked about their frequent use of scientific terminology in communicating information about breastfeeding, there is limited evidence of efforts directed to advancing scientific understandings of breastfeeding among their clients or the public. Some practitioners were of the opinion that the people they work with are not interested in scientific concepts or arguments supporting the information

provided to them about breastfeeding. Findings here suggest that practitioners draw on their civic and cultural literacies to help frame their breastfeeding promotion strategies in order to create supportive environments and public support for breastfeeding. They offered few examples, however, of practices which reflected ways they attempted to enhance the cultural and civic literacy skills of clients and the public. Zarcadoolas, Pleasant and Greer (2006) emphasized the interconnection of health literacy skills of individuals and the practitioners with whom they interact.

Practitioners' concern about the lack of consistency in breastfeeding information provided to mothers reflected contradictions among different ways of knowing, in particular between scientific and cultural literacies as domains of health literacy. The focus on trying to increase consistency in advice provided to mothers by educating practitioners is based on the assumption that there is one best way of knowing about breastfeeding. This approach is consistent with the emphasis on transmission of information noted in Chapters 4 and 5. Their talk also reflects the tension between a medical model of health literacy privileging scientific ways of knowing and a public health model of health literacy integrating multiple ways of knowing, including the scientific, cultural and civic domains of health literacy. There was recognition among practitioners that current practices are not effective and there was openness to further engagement with the concept of health literacy. The practitioners suggested that organizational change is necessary to enable a shift in their practice.

Findings from this study show that practitioners have a wide range of opinions on the meaning of health literacy. The lack of a universal and shared understanding of health literacy among practitioners, in combination with the uncertainty and tension running throughout their talk, are important considerations for exploring implications for practice as seen in the next chapter.

Chapter 7

Implications of findings for practice

7.1 Introduction

Over the last three chapters, I have examined the extent to which practitioners' descriptions of their breastfeeding promotion efforts, along with my observations of their practices in selected settings, reflected various dimensions of health literacy as described in the current literature. I also examined difficulties and dilemmas in operationalising health literacy which practitioners identified as they talked about their breastfeeding promotion practices. Having addressed the first two objectives of this thesis, I now turn to the third objective. In this chapter, I draw implications for incorporating health literacy approaches into breastfeeding promotion practice from the findings presented in Chapters 4, 5 and 6.

Implications for findings from this case study are set within the context of two health district policies as described in Chapter 3 (see section 3.4.2.2, p.122). The first policy pertains to the promotion and support of breastfeeding, and in a more particular way, to establishing breastfeeding as the cultural norm. The second policy, which addresses health literacy as a determinant of health, is intended to ensure that the District Health Authority (DHA) meets the literacy needs of the population it serves, in particular communication of health information, navigation of programs and facilities, and access to programs and services. These two distinct policies are intended to influence the practices of health practitioners throughout the health district. Findings presented in this case study have reflected the convergence of the two policy priorities as practitioners talked about their

experiences in promoting breastfeeding in a district where breastfeeding initiation and duration rates are lower than in other parts of Canada, and where health literacy has been identified as a concern by local researchers and district health policy makers.

To address objective three, I now take two routes to identifying implications of my findings for practice. First, by analyzing themes and drawing from the literature, I examine the extent to which these findings point to measures that practitioners can take to integrate dimensions of health literacy into their practice. Second, I examine ways the data suggests that practitioners could strengthen their capacity to incorporate aspects of health literacy in their practice. The first is a more directive approach; whereas, the second suggests that practitioners need to be more involved in determining whether and how they can integrate health literacy into their practice. This second approach emphasizes the need for more participation by practitioners both in applying dimensions of health literacy in their practice and also in the evolving conceptualization of health literacy. I begin by identifying some measures that practitioners can take to integrate the multifaceted concept of health literacy into their breastfeeding promotion practice.

7.2 Measures to integrate health literacy into practice

Findings suggest a number of actions that could be taken by practitioners to incorporate facets of health literacy into their breastfeeding promotion practice. These suggestions reflect functional health literacy, interactive health literacy, and critical health literacy as described by Nutbeam, and also the more recent understanding of health literacy as composed of multiple domains of literacy.

Efforts may be directed to individuals and /or communities. I begin by exploring implications of findings for practice which pertain to functional health literacy.

7.2.1 Functional health literacy

If recent findings derived from the international literacy survey data showing population distribution of literacy and health literacy proficiency (see section 3.4.1.2, p.108) are to be believed, practitioners in this health district are likely to be directing information to, and interacting with, clients who experience low levels of functional health literacy. Likewise, if the district policies on breastfeeding promotion and health literacy are to have an impact, then practitioners' awareness of the likelihood that clients experience literacy difficulties would appear to be of prime importance. The extent to which practitioners recognized functional health literacy as relevant to their breastfeeding promotion practice, however, was not clear. In describing their practices, few practitioners mentioned ways to accommodate clients with low functional health literacy and fewer mentioned ways to enhance it.

As a starting point, efforts appear to be needed to enable practitioners to recognize the possibility that they are interacting with people in their communities who face low functional literacy as a barrier to accessing, understanding and using infant feeding information provided. Although health literacy was the subject of in-service sessions with practitioners and orientation of new staff, it would appear that more efforts are needed to engage the range of practitioners across the perinatal continuum of care in identifying the implications of low functional health literacy to their breastfeeding promotion practice. Erlen (2004) has referred

to functional health illiteracy as a “silent disability” which demands the attention of health practitioners. She said, “Unless health professionals recognize health illiteracy as an issue requiring attention, the lack of communication that results between patients and their practitioners will widen the chasm of health disparities” (p. 150). The growing health literacy research base is one resource that needs to be more fully applied. For instance, one promising approach to increasing practitioners’ awareness of the prevalence of low health literacy among population groups they serve is the interactive health literacy GIS map developed by the Canadian Council on Learning (2008) and referred to in section 3.4.1.2 (see Figure 3, p.110). This tool was designed to enable practitioners to determine the extent and distribution of low health literacy community by community in health districts in Canada. By using this approach to understand better the health needs of their communities (Benigeri 2008), practitioners should be able to tailor interventions to reach those people most vulnerable to low health literacy.

I now focus on implications for practice in three areas relevant to functional health literacy: recognizing the situational demands for literacy, striving for clear oral communications, and addressing the dilemma of identifying clients with low literacy and the social stigma associated with low literacy.

7.2.1.1. Recognizing the situational demands for literacy

Findings suggest that practitioners create a demand for literacy skills by means of the tasks that they present to clients and expect them to perform, such as reading books and pamphlets about breastfeeding, participating in learning activities or completing assessment forms. People with low literacy skills face particular

barriers in understanding print materials which are not written at appropriate levels of readability and in performing tasks requiring reading and writing skills when interacting with practitioners (Rudd 2007). Practitioners appeared to be aware that clients required literacy skills to engage in tasks in their practice settings. Some practitioners reported observing clients' performance of these tasks as a way of identifying those who experienced difficulties with the written word.

Practitioners did not mention, however, specific ways in which they modified the situational demand for basic literacy skills placed on clients in their respective practice settings. Nor did they refer to any specific tools or strategies to enable them to assess whether or not their clients were able to meet the requirements for literacy placed on them in practice settings. Furthermore, no mention was made of the health literacy audit which is appended to the health literacy policy posted on the GASHA website (see section 3.4.2.2.2, p.124 and Appendix C). The health literacy audit is intended to engage practitioners in assessing their practices and work environments according to 16 practice indicators reflecting aspects of health literacy. A number of these indicators have implications for practitioners involved in breastfeeding promotion, for example ensuring ease of use of print materials and forms including regular review for readability, making available alternates to print materials, asking clients if they need help in filling out forms, and checking with clients that they have understood information.

Findings suggest that the readability of commonly used print resources on breastfeeding was not considered a significant problem by most practitioners in this study (see section 4.2.2, p.172). Only a few practitioners expressed their

concern about the high readability of key infant feeding resources even though these publications were under review for readability and revised by the provincial health department during the time of the study. A lack of concern about the readability level of the breastfeeding materials they routinely provided does not reflect adherence with practice indicator five which states, “Our print materials are easy for adults with limited literacy to read”. In addition, reports of attempts to identify clients’ literacy ability by giving them assessment forms to complete is not consistent with the practice indicator 12 which reads: “We ask all clients if they need assistance filling out forms”. Findings suggest that further measures are needed to engage practitioners involved in the promotion of breastfeeding in assessing the situational demands for functional health literacy within their practice settings and in identifying ways to accommodate clients with low literacy.

Although the readability of print materials has been the main focus of health literacy research and practice interventions reported in the literature, it is considered a necessary but not sufficient focus for practice interventions (Rudd 2002). According to Shohet (2003), most people do not rely on print materials for information about health issues and practitioners need to find other ways to provide health information. The literature on effectiveness of breastfeeding promotion interventions has also identified the limitations of distributing print material and the importance of personal communication in promoting breastfeeding (see section 2.3.2, p.81). Practitioners in this study pointed to the importance of face-to-face opportunities for oral communication with clients. The issue of clarity, however, in such communications also arises as discussed next.

7.2.1.2 Striving for clear oral communications

Practitioners frequently mentioned the importance of communicating in clear language when talking with women about breastfeeding, especially when explaining breastfeeding techniques. They suggested a number of specialised terms related to breastfeeding which were likely to be unfamiliar to women prior to encountering the issue of infant feeding. Despite the value they placed on clear communication, they did not describe specific strategies used to determine if their clients, in fact, understand the information they provided. Practice indicator ten in the health literacy audit states: “We check with clients to ensure they have understood the information we give to them”. Findings suggest that measures should be taken by practitioners to explain breastfeeding by using clear language and avoiding jargon, and also to develop communication strategies for checking that clients understand terms used. One example which has been widely promoted in the US is the teach-back approach in which practitioners ask patients/clients to explain what they have been told (Pfizer Public Health Group 2006).

7.2.1.3 Identifying clients with low literacy

Difficulty in identifying clients with limited literacy skills was a prominent source of tension when practitioners were asked about literacy within the context of their breastfeeding promotion practice (see section 4.4.1, p.195). As seen in Chapter 2, practitioners’ identification of clients with limited skills has been a central concern in the health literacy literature (see section 2.2.5, p.55). Many practitioners suggested that clients conceal the fact they have trouble reading and are hesitant to admit to practitioners that they cannot understand written materials. Practitioners were reluctant to ask clients forthrightly about their literacy skills. As

noted previously, some practitioners reported using indirect means of identifying clients who have trouble with the written word. None referred to using particular tools or strategies, such as those mentioned in section 2.2.5, to identify those with literacy difficulties. Furthermore, there was no mention of a list of cues for identifying clients with limited literacy skills available on the district health authority website (<http://www.gasha.nshealth.ca/literacy/default.htm>).

While findings from this study suggest that practitioners lack ways of recognizing a lack of basic literacy skills which may limit clients from becoming functionally health literate, more attention needs to be given to the problematic issue of assessment. As noted in Chapter 2, there is little evidence in the literature supporting the effectiveness of health literacy screening in clinical practice settings and there is evidence of the potentially alienating effect of testing on clients (see section 2.2.5, p.56). Moreover, given the importance practitioners in this study placed on maintaining their relationship with clients, it is highly unlikely that the introduction of health literacy testing would be considered an acceptable practice within the context of their breastfeeding promotion practice.

In essence, health literacy assessment focuses on health literacy as a property of the individual and disregards the environment in which individuals are subjected to apply literacy skills in order to function in that setting. Defining health literacy as the interaction of individuals and systems rather than a set of concrete skills that individuals need to be functionally health literate invites a different approach to practice. Practices which place greater emphasis on changing the environment in which people access, understand and use health relevant information, rather

than on the individual, are more consistent with this broader understanding of health literacy. Furthermore, viewing health literacy as a shared responsibility between individuals and their practitioners is more likely to encourage practitioners to look at their own practices, not just the level of ability of their clients.

Given the complexity of health services and information systems, all people are likely to confront health literacy challenges today. Brown et al. (2004) have argued for a universal approach in addressing health literacy—one that includes all individuals and all practitioners involved in health literacy interactions. A universal approach assumes that all patients/clients at some time have a limited understanding of medical/health concepts whether or not they have literacy difficulties. This approach has been suggested as an alternative to screening, in particular because screening has potential to embarrass and stigmatize people with low literacy.

It is noteworthy that the health literacy policy adopted by GASHA was written in such a way as to apply to all people in the health district, not only residents with limited literacy. The health literacy audit which was appended to the policy was designed to engage practitioners in assessing the environment in which they provided information and services to people of this health district. The term “environment” refers not only to the physical setting, such as signs directing patients to services, but also to the context in which practitioners interact with individuals including the tools, resource materials and protocols that are part of their interaction. With managers, practitioners were expected to effect changes in

their physical settings and in their practices. One practice indicator in the health literacy audit reads, “Our staff are aware of health literacy issues and are sensitive to the needs of clients who are limited in literacy” (number 14). Practitioners in this study appeared to struggle with identifying and addressing the issue of low literacy among their clients. Indeed, their recognition of the stigma associated with low literacy appeared to be central to their concerns about identifying clients with low literacy in their practice (see section 4.4.1, p.195). Practitioners’ reluctance to address literacy difficulties for fear of embarrassing their patients and clients could have been a reflection of their sensitivity to the issue.

The discomfort with the issue of low literacy among practitioners in this study mirrors reports in the literature (see section 2.2.5). As pointed out in the literature, social stigma associated with low literacy is considered to be a major barrier to enhancing health literacy practice among practitioners in general, and one that relates directly to the interaction of patients/clients and practitioners. As noted by Parikh et al. (1996), “Shame is a deeply harboured emotion that plays an important role in understanding how low literate patients interact with health care providers” (p. 33). It would appear that more attention needs to be directed to addressing the social stigma associated with low literacy. The challenge is to address the health literacy needs of everyone while ensuring that those who face the greatest barriers to being health literate are not excluded or further marginalized as efforts are directed to all.

The Report of the Expert Panel on Health Literacy (Rootman and Gordon-El-Bihbety, 2008) suggested some ways in which social stigma could be addressed.

One way was by improving awareness and sensitivity of health professionals about the impact of social stigma on individuals with low literacy and health literacy. Another suggestion was increasing the skills of health professionals in recognizing low literacy and health literacy levels. A third way was by raising public awareness about the stigma associated with low health literacy and that most people at some time experience difficulties understanding health information. While these suggestions are directed to increasing awareness about the stigma of low literacy and skills in recognizing low health literacy, they do not address the basic problem of stigma that people with low literacy experience.

In the district where this study was set, efforts have been directed to raising awareness of health literacy among health practitioners and the public (see section 3.4.1.2, p.111). Nevertheless, findings suggest that more measures are needed to address the stigmatization of low literacy. It is noteworthy that social stigma of low literacy has been specifically addressed recently in a resource on health literacy and cultural competence developed by the provincial department of health for health practitioners and community partners in all health districts. The purpose of the resource was to provide practitioners with assessment tools and techniques for print and spoken communication of health information to diverse populations in Nova Scotia⁵². The shame associated with low literacy and the social exclusion of those people with low literacy was acknowledged. Ways of minimizing barriers to health literacy were suggested, for example, consulting with intended groups in developing materials, providing information in

⁵² Nova Scotia Department of Health, Primary Health Care. *Messages for Many Voices: Integrating Cultural Diversity and Health Literacy in Health Materials*. Personal communications Janet Rhymes, June 3, 2008

alternative formats, and using personal and community channels to share messages to name a few.

While the above examples acknowledge that the shame that people with low literacy experience is a health literacy concern and that practitioners need to be attentive to it, they do not provide solutions to the core problem of stigma. Solutions are needed which move beyond functional health literacy's individualized approach which perpetuates the stigmatization of people with literacy challenges. Looking at how stigma is addressed in other fields of health practice may offer some insights. For example, approaches that could help inform the health literacy debate come from the area of disabilities and health. Like literacy, disability has tended to be equated with individual deficits and social disadvantage (Rioux and Daly 2006). In their discussion of approaches to taking action on disability issues, Roux and Daly outlined ways of addressing disability issues which reframe the problem from an individual to a societal one. They identified four models of disability. The first two, biomedical and functional models, focus on individual disability and approach it as a field of professional knowledge and expertise. The prime mode of action for the biomedical model is diagnosis and treatment. For the functional approach, service provision such as rehabilitation is identified. These approaches are consistent with the emphasis in the functional health literacy literature on identifying individuals with low literacy levels and providing them with remedial services to accommodate their deficits.

In contrast, the second two, the environmental approach and the rights-outcome approach, locate disability within society. The environmental approach uses

policy to address a problem which is seen as a failure of ordinary environments to accommodate diverse people. In applying this to a health literacy context, efforts would be directed to reduce the demand for clients with low levels of literacy to complete tasks in health settings which depend on a command of the written word. This approach is not unlike the approach taken by the health literacy policy described in this study which emphasizes practitioners' involvement in the health literacy audit with the goal of improving practice settings to better accommodate those with a range of literacy levels. The fourth approach, however, moves beyond the environmental approach by focusing on the broad systemic factors that prevent people from fully participating as equals in society. The rights-outcome approach applies human rights principles and legal challenges to address the social causes of disability resulting from how individuals relate to the way in which society is organized. It addresses the fundamental problems of discrimination and stigmatization. So while suggestions for addressing functional health literacy emerging from my findings reflect the first three models to varying degrees, more consideration could be given to this last approach which appears to get closer to the problem of stigmatization of people with low literacy. One challenge of this approach, however, is that health practitioners may not see this level of involvement in social change within their scope of practice or ideology.

In this section I have discussed measures to address functional health literacy. This approach to health literacy is derived from a deficit perspective of literacy—one which has tended to emphasize the limitations that individuals with inadequate basic literacy skills experience as they try to function in their everyday worlds. Measures for practice suggested in this section have reflected some ways

in which practitioners can accommodate clients who have low functional health literacy in order for them to acquire information such as about how to feed their babies. Little mention, however, was made of ways to enhance functional literacy or functional health literacy. It is noteworthy that neither referral of clients to literacy programmes nor practitioners' collaboration with literacy practitioners were mentioned by practitioners. Several authors have called for greater collaboration among health practitioners and literacy practitioners (Rudd 2002; Shohet 2004; Gillis et al. 2004). They have contended that by working together, health practitioners could learn more about the complex issue of literacy and how to apply adult education approaches while literacy practitioners could learn more about health issues and ways to effectively interact with the health system. These authors have suggested that health and literacy practitioners could be strong allies for advocating for system-wide changes that appear to be needed to address the issue of low health literacy in today's information dependent society.

I now explore measures for breastfeeding promotion practice which reflect ways to enhance interactive health literacy—a way of thinking about health literacy more consistent with strengthening people's capacity rather than offsetting their deficits.

7.2.2 Interactive health literacy.

Renkert and Nutbeam (2001) have argued that “The health literacy concept offers us the opportunity to shift our thinking in antenatal education away from a simple transfer of knowledge, to a more active process of empowering women for parenthood” (p.388). They claimed that antenatal educators tended to be untrained

in principles of adult education and were missing opportunities to enable parents to develop the knowledge, skills, confidence and self-esteem they needed for healthy parenting. Findings from my study suggest that a shift is needed away from practices which focus on transmission of breastfeeding information to practices more in keeping with features of interactive health literacy. If practitioners were to apply Nutbeam's suggestions for enhancing interactive health literacy by applying adult education principles, they would put a greater focus on building on mothers' experiential knowledge, recognizing how the context of their lives influences their feeding choices, and respecting their personal autonomy in choosing to breastfeed or not.

To this end, it has been established that personal forms of communicating information are considered more effective than distributing print materials to achieve positive breastfeeding outcomes (Couto de Oliveira, Camacho and Tedstone 2001; Palda, Guise and Wathen 2004). Practitioners in this study recognized face-to-face communication with expectant and new mothers as a key aspect of their breastfeeding promotion efforts. Few strategies, however, were described which reflected ways to enhance interactive health literacy as a means of developing mothers' capacity to act on information. The transmission of breastfeeding information tended to prevail not only through practitioners' use of print materials but also in their oral communications. Practices, as described by practitioners and observed by me, suggested that face-to-face communication with clients did not necessarily reflect interactive communication. Brookfield (2005a) has argued that interactive communication needs to be deliberately fostered and not all conversational interactions are constructed in ways to enable one to act

upon shared information. He pointed to the relevance of practices from the field of adult education in facilitating effective interaction between educators and learners. As noted in Chapter 2, Nutbeam (2000) claimed that health practitioners should pay more attention to interpersonal communication and to applying principles of adult education as a means of strengthening capacity for people to act on the information they receive (see section 2.2.3.1, p.34).

Little mention was made by practitioners of specific ways to strengthen women's capacity to use information provided, such as by increasing maternal motivation or enhancing self-confidence, as proposed by Nutbeam. Although reference was made to using material incentives to encourage mothers to attend education sessions, ways to increase their motivation to act on breastfeeding information were not reported. Practitioners emphasized that mothers' self-confidence was critical to sustaining breastfeeding. Instilling maternal confidence, however, implies a respect for mothers' autonomy in choosing to breastfeed or not. It could be seen as critical to fostering a mother's sense of self-efficacy concerning the feeding of her infant. Findings suggested that practitioners' reported efforts tended to be directed to persuading mothers to breastfeed rather than enabling them to make an informed and free choice in determining how to feed their babies (see section 5.2.1.1, p.223). The relationship between practitioners and clients appeared to be put to the test when mothers reportedly did not act in concordance with practitioners' advice to breastfeed. Practitioners' descriptions suggested that the moral judgement of mothers' feeding choices frequently contributed to a strain between practitioners and women when breastfeeding was discussed.

Many practitioners referred to the efforts of CPNP practitioners in enabling mothers to connect with others who have breastfed. During focus groups, mothers participating in the CPNP programme emphasized the value of having opportunities to access support of other mothers and to share information about breastfeeding with each other. Social support also featured prominently in descriptions of the provision of breastfeeding information in First Nation communities. Enabling social support appears to be a key aspect of practitioners' breastfeeding promotion efforts, one that is consistent with Nutbeam's notion of building capacity for individuals to use information. Findings imply that one way to engage practitioners in practices that are more in keeping with interactive health literacy is to reinforce their existing efforts in fostering opportunities for social support.

Observed and reported practices in the CPNP family resource centre setting were more likely to reflect practices consistent with the notion of enhancing interactive health literacy than were those in the perinatal clinic and prenatal class setting. In the informal setting of the family resource centre, the CPNP coordinator attempted to create a comfortable place for women to share breastfeeding information and discuss common concerns with each other. Kelly (2006) suggested that more attention needs to be directed to making use of informal situations in which mothers learn about breastfeeding, i.e. ways which are "not delivered top down by professionals" (Kelly 2006, p.191). Creating informal learning opportunities for sharing breastfeeding information fits well with traditional, indigenous practices of information sharing among women in Nova Scotia. Before the influence of medicalization on childbirth and breastfeeding, women depended upon local

breastfeeding knowledge and support. McKay (2006) has described the lives of Nova Scotia women a century ago when “Traditions, information and happiness, were shared in the sisterhood of knitting circles and around the kitchen table” (p. 383). Practices directed to supporting mothers’ engagement in informal learning opportunities are ways to foster social support and enable women to draw upon experiential knowledge related to breastfeeding.

7.2.3 Critical health literacy

Practitioners could play a stronger role in enabling their clients to develop critical health literacy skills in order to appraise breastfeeding information. Although practitioners appeared concerned about contradictory information coming from various practitioners, their suggestions for addressing the problem were directed to educating practitioners, in contrast to developing mothers’ skills in critical appraisal. Their reports of efforts to ensure that practitioners provide consistent information to mothers are in keeping with an emphasis in the literature on the role of practitioner education in promoting and supporting breastfeeding (Dykes 2006). Women today, however, are exposed to information about infant feeding, not only from practitioners, but also through a wide array of sources such as the Internet, television, and magazines, not to mention friends and family. Dealing with excessive and contradictory information is a requirement for today’s parents and one that requires critical literacy skills (Renkert and Nutbeam 2001). Focusing on enhancing the skills of mothers, not just educating practitioners, represents a significant shift in the way the problem of contradictory infant feeding information is currently framed and addressed.

Enhancing maternal skills in critical appraisal is consistent with Nutbeam's emphasis on enabling individuals to become more capable of acting on information provided and, ultimately, becoming more independent in making decisions relevant to health. Cooper and Geyer (2008) have suggested that the role of health educators is to enable learners to connect what they learn in formal educational interventions with what they learn informally from their experience and from other sources such as peers, the media, the Internet, etc. More attention by practitioners to developing mothers' skills in critical health literacy, and less on providing information, may allow mothers to develop a more coherent approach to applying information to their infant feeding choices. Of course, mothers may still not be able to act on advice, even if critically assessed, if they face conditions in their lives which prevent them from doing so.

Some practitioners made reference to literacy as a determinant of health and to its interplay with other social and economic health determinants. Their examples of practices, however, did not reflect an emancipatory approach to critical health literacy as depicted in Nutbeam's model. Even though the low prevalence of breastfeeding was frequently framed as a socio-cultural problem, practitioners' descriptions suggested that efforts tended to be directed to influencing mothers' feeding choices rather than to effecting community and social change. Suggesting that the breastfeeding problem is societal is not consistent with the local focus on delivering breastfeeding information to mothers. This individualistic approach implies that responsibility for solving the problem rests primarily with mothers in the district.

Efforts directed towards policy change, such as improvements in maternity leaves and benefits for mothers, could serve to better conditions so breastfeeding could become a more viable option for women. While several practitioners talked about how the socio-economic context of women's lives influenced their feeding choices, few described ways in which they engaged clients and others in their communities in addressing conditions which limit women from acting on advice to breastfeed. Knaak (2005) has argued that examining choice is different than examining decision-making in that, "An inquiry into the problem of choice is primarily about understanding the *environment* that contextualizes mothers' experience in relation to infant feeding" [emphasis in original] (p. 198). Knaak (2006) suggested that the understanding of informed choice has changed dramatically over time from one of actual choice to one of a moralized and constrained choice. According to her, this is particularly relevant in light of increasing attention directed to breastfeeding advocacy in health policy and programming in Canada.

Hausman (2003) has argued that less affluent and educated women have fewer options and less access to adequate material and social resources to support a breastfeeding decision. Hausman asserted that breastfeeding advocacy must "pay more attention to the structural impediments to breastfeeding—economic barriers, lack of support from medical personnel, and work/family patterns—that mothers face" (p. 227). Given the dominance of the medical model in breastfeeding promotion in this district, it is not surprising that efforts are directed to changing feeding practices of mothers, and not to removing social and community barriers

in order to create more supportive physical and social environments for breastfeeding.

The lack of attention to addressing the social determinants of breastfeeding fails to recognize breastfeeding as a maternal and child health issue highly relevant to social disparities and health inequalities (Renfrew et al. 2006). The limited reference to practices reflecting critical health literacy is consistent with Nutbeam's claim that attention to critical health literacy is least likely to be present in health education interventions. This finding, however, is not surprising as health practitioners are unlikely to see challenging structural issues as part of their job, as Raphael (2008) has pointed out in reference to Canadian public health practitioners. Next I explore some ways that practitioners could incorporate Nutbeam's ideas of interactive and critical health literacy in their breastfeeding promotion practice.

7.2.4 Applying Nutbeam's key premises to enhance interactive and critical health literacy in breastfeeding promotion practice

Applying Nutbeam's key premises about health literacy in reflecting on breastfeeding promotion practices is helpful in identifying actions practitioners can take for a capacity building approach to their promotion and support of breastfeeding. Table 7 starting on p.342 shows ways in which Nutbeam's key ideas underpinning interactive and critical health literacy can be applied to breastfeeding promotion practice. Selected examples are drawn from findings to illustrate measures practitioners can take to enhance interactive and critical health literacy in their practice.

Table 7. Applying Nutbeam’s premises for interactive and critical health literacy

Premise	Interpretation	Examples of measures practitioners can take to enhance interactive and critical health literacy
Shift from information transmission to skill development	Appreciation that current efforts contribute to excessive and inconsistent information on infant feeding directed to mothers while limiting opportunities for strengthening mothers’ capacity to act on information provided.	<p>During prenatal education classes, focus on development of health literacy skills related to accessing, understanding and appraising infant feeding information, and capacity for applying relevant information including strategies for increasing self-efficacy, such as instilling self-confidence and creating opportunities for social support, instead of directing large amounts of information to expectant parents.</p> <p>In perinatal clinic, engage clients in talking about what information, skills and sources of support they need if they breastfeed.</p> <p>Integrate into CPNP learning activities development of skills in critically appraising infant feeding information to address contradictions in messages and to determine relevance of information to mothers’ lives.</p>
Focus on the life experience and knowledge that adults bring to the learning situation	Recognition of what experience and knowledge mothers have instead of what they lack, i.e. focus on their capacity not deficits	<p>In interactions with expectant mothers, discuss the extent to which they have been exposed to breastfeeding and how this influences their feeding decisions.</p> <p>Provide opportunities for pregnant women to meet with mothers to share information about the breastfeeding experience including benefits and disadvantages, especially in rural areas where women may lack access to breastfeeding information and social supports</p>

Table 7 *continued from the previous page*

Premise	Interpretation	Examples of measures practitioners can take to enhance interactive and critical health literacy
Recognition of the context of one's life in learning	Recognition that socio-cultural and economic conditions of daily life influence maternal infant feeding choices	<p>Encourage discussion with mothers about the influence of their personal circumstances on their feeding choices and tailor information to their needs and concerns— including information about bottle feeding if relevant.</p> <p>Talk with women about how the socio-cultural and economic circumstances in their lives may constrain or support breastfeeding.</p> <p>Discuss with women whether and how constraints to breastfeeding can be addressed and support strengthened</p>
Respect for personal autonomy and self-directed learning	Appreciation for practices which respect clients' independent thought and action consistent with personal empowerment	<p>Honour the intent of enabling informed choice by providing unbiased information, rather than persuading mothers to breastfeed.</p> <p>Be sensitive to the judgmental nature of infant feeding choices when providing information to mothers and avoid moral judgement</p> <p>Discuss with clients what they see as challenges to their self-confidence in acting upon their feeding choices.</p> <p>Respect a woman's choice not to breastfeed.</p>

Table 7 *continued from the previous page*

Premise	Interpretation	Examples of measures practitioners can take to enhance interactive and critical health literacy
Personal and community empowerment to act on social determinants of health	Strengthening capacity for community action to change policies and organizational practices related to healthy infant feeding practices	<p>Form alliances with practitioners and mothers to challenge social policies, structures and norms which do not support a mother's right to determine how she can best feed her infant</p> <p>Advocate for policies and practices which respect the right to breastfeed in public places</p> <p>Advocate for employment and child care policies that support women who choose to breastfeed</p> <p>Engage women in critical analysis of the structural constraints to accessing information and support for breastfeeding, such as lack of transportation to services and programmes</p> <p>Advocate for policies and programmes that take into account literacy as a determinant of health with recognition that women with lower levels of literacy and education are less likely to breastfeed.</p> <p>Ensure that breastfeeding promotion interventions increase health literacy of marginalized women, who are least likely to breastfeed, rather than contribute to further inequality in health literacy and disparities in child health</p>

As illustrated in Table 7, one of the advantages of looking at breastfeeding promotion practices through Nutbeam's lenses of interactive and critical health literacy is that it can allow one to see the differences between practices that focus

on transferring information and those that focus on strengthening capacity to act on information. Next I look at implications for practices which extend beyond Nutbeam's model to the idea that there are multiple domains of health literacy.

7.2.5 Multiple domains of health literacy

Practitioners' descriptions of their practices reflected elements of scientific, cultural and civic literacy as aspects of health literacy. Little mention, however, was made of ways that practitioners attempted to enhance their clients' scientific, cultural or civic literacies in the promotion and support of breastfeeding. Instead, practitioners' comments tended to focus on how they, as practitioners, drew upon these multiple domains of their own health literacy in their breastfeeding promotion efforts. Zarcadoolas, Pleasant and Greer (2006) framed health literacy not just as the quality of clients but also of the practitioners with whom they interact. Practitioners' apparent lack of attention to enhancing the multiple literacy skills of their clients parallels their lack of reported examples of practices directed to enhancing interactive and critical health literacy skills of clients. Their focus was mainly on breastfeeding information transmission, not on developing the health literacy skills of their clients.

Nevertheless, findings suggest that practitioners brought their own scientific, cultural and civic literacy skills to their breastfeeding promotion practice. As their descriptions and the literature support, breastfeeding promotion is a complex issue which requires the practitioner to be able to communicate scientific evidence supporting recommendations to breastfeed with an understanding that breastfeeding is a socio-cultural practice. Tensions related to the normalization

and moralization of breastfeeding apparent in practitioners' descriptions of their practices as discussed in Chapter 5 (see section 5.2.1.2 , p.228 and section 5.2.1.3 p.231) reflect the importance of understanding the socio-cultural implications of promoting breastfeeding and the idea of cultural literacy. McCabe (2006) suggested that culturally competent practitioners understand where clients get their information and what their clients believe, stating: "Culturally competent health care practitioners are able to appreciate the practices and health beliefs of their patients, without judgment, even when they contradict their own beliefs" (p.461). In addition, a level of civic literacy would appear to be essential if practitioners are to address the policy and organizational changes required to create public support for breastfeeding and breastfeeding friendly workplaces and communities. For instance, to expand civic literacy, practitioners could extend their efforts from a focus on informing individual mothers to addressing the structural constraints to breastfeeding. Of course, this assumes that practitioners accept that they have a role in policy and organizational change and that it is not just the role of policy makers.

The idea of multiple literacies is reflected in Dykes' (2006) contention that practitioners' knowledge of breastfeeding stems from different ways of knowing. According to Dykes, practitioners bring embodied knowledge, vicarious knowledge, practice-based knowledge and formal theoretical knowledge to their breastfeeding promotion practices. Embodied knowledge flows from personal experience of breastfeeding a baby. Vicarious or cultural knowledge comes from learning experiences throughout one's life such as observing family members breastfeed. Practice-based knowledge is learned from observing other

practitioners. Formal/theoretical knowledge develops from engaging in structured learning opportunities such as training courses which are based on evidence from current research about breastfeeding. Dykes (2006) claimed that the extent to which these four forms of knowledge are integrated by practitioners depends on the opportunities they have to learn how to make connections and develop coherence between them. According to her, educational programmes which prepare practitioners for their role are paradigm specific. As such, different paradigmatic stances reflect different disciplines and how practitioners in various disciplines view issues (Kuhn 1970). For example, views on breastfeeding of medical practitioners whose education stems from a scientific model are likely to differ from community-based practitioners, such as CPNP coordinators who have less scientific based education and more experientially derived background in counselling and facilitation.

Practitioners' descriptions of their breastfeeding practices suggest that there are implications for enhancing clients' multiple domains of health literacy, especially in combination with enhancing critical health literacy. For example, practitioners spoke frequently about the different and sometimes competing ways of knowing about breastfeeding. Consequently, mothers experience confusion when they encounter contradictory information. Mothers' exposure to inconsistent information is unlikely to be a problem which can be solved solely by practitioners' efforts to standardize the delivery of information from various practitioners. Practices which enable a mother to develop and draw upon different ways of knowing about breastfeeding, along with skills in critical appraisal, could assist her in dealing with the conflicting information she receives about

breastfeeding. Such an approach is consistent with encouraging less dependence on practitioners for the definitive answer on how to feed one's baby. Such an approach requires a fundamental shift in breastfeeding promotion practice away from a focus on the transmission of information to persuade mothers to breastfeed to more emphasis on enabling mothers to determine what information they need and its relevance in making their feeding decisions. This shift in practice would extend to determining the structural barriers that constrain mothers from acting on advice to breastfeed they receive and, in turn, would involve identifying what community actions are needed to address these barriers.

7.3 Implications for advancing health literacy in practice and in concept

In drawing implications from the findings presented in Chapters 4, 5, and 6, I have identified a number of ways that practitioners can integrate various approaches to health literacy into their breastfeeding promotion practice. Many of these suggestions have focused on what they can do to shift their practice from its current focus on the provision of breastfeeding information to building capacity for women to use information provided. I have made these suggestions recognizing that these findings reflect the lack of a universal or shared understanding of health literacy among practitioners. These findings also reflect their uncertainty and discomfort in identifying and addressing health literacy issues in their practice, and dilemmas that speak to challenges in operationalising notions of health literacy.

My suggestions in this section on how practitioners could redirect their practice in ways that could reflect fuller engagement with notions of health literacy were

somewhat directive. They could be open to the criticism that they are not unlike transferring information to clients without considering their capacity to act on this information. Measures suggested for enhancing health literacy practice often do not take into full account the organizational barriers practitioners face within the context of their varied practice settings and the health system within which breastfeeding promotion efforts are organized and delivered. These barriers need further study and are beyond the scope of this thesis.

This brings me to my second approach to identifying implications for practice—one which is more consistent with capacity building. I contend that if practitioners are expected to incorporate notions of health literacy into their breastfeeding promotion practice, they need to be more fully engaged in looking at the implications of applying the concept of health literacy to the development of their practice. This approach entails enabling them to determine the extent to which health literacy is applicable to their practice. Such an approach builds on their experience, recognizes the importance of understanding the context in which they practice, and respects their autonomy as practitioners and as learners.

I suggest that there is a need for practitioners to engage in critical reflection so that they can frame their breastfeeding promotion practice in ways that address tensions and dilemmas associated with operationalising various approaches to health literacy reflected in these findings. The notion of “reflective practice” emanates largely from the work of Schön (1987; 1991) who emphasized that practitioners must “reflect *in action*” and not just depend on theories and strategies that may not be relevant to the complex problems they encounter in their practice.

He suggested that a feature of professional practice is its focus on problem solving. Schön said, “If it is true that professional practice has as much to do with finding the problem as with solving the problem found, it is also true that problem setting is a recognized professional activity” (1991, p.18). He also argued that professional knowledge is a source of power because it endows practitioners with the power to frame the problem. Different ways of framing problems lead to different ways of constructing measures to address the problem.

Findings suggest that not all practitioners are content with their current approach to addressing breastfeeding in this district. In fact, practitioners in focus group interviews were explicit about the need for change. They suggested that there was merit in applying the concept of health literacy to the promotion of breastfeeding. Participants said that the health literacy framework presented in my concept map provided them with an opportunity to rethink how they go about their efforts to increase breastfeeding among women in the health district.

Findings suggest a need for refocusing practice from providing information with the aim of persuading women to breastfeed to increasing their capacity to act on this advice. If this is to occur, I suggest that practitioners need to be involved in critically reflecting on the health literacy implications of their efforts to promote and support breastfeeding. This engagement in critical reflection appears necessary for practitioners to reconcile some of the tensions in their practices which are undertaken within the context of the health district’s breastfeeding and health literacy policies—both intended to guide their practice. Engagement of practitioners in critical reflection could be seen as a prerequisite to determining

the feasibility of incorporating the multidimensional concept of health literacy into their practice and furthermore, to contributing to future development of the concept of health literacy.

7.3.1 Engaging practitioners in critical reflection

Renfrew et al. (2006) argued that breastfeeding is a complex public health issue which involves practitioners from a number of disciplines and sectors. In highlighting some of the challenges in practice development, they contended that “production and dissemination of evidence and guidelines is necessary but not sufficient on its own to affect change in practice” (p. 245). Furthermore, Dykes (2006) claimed that it is time for practitioners to engage in critical reflection of their breastfeeding promotion practices. She said an approach is needed to “facilitate personal reflection and critical engagement with broader socio-political issues, thus allowing for collective understanding and change” (p. 204).

Engaging practitioners in reflecting critically on their breastfeeding promotion practice through the multifaceted concept of health literacy may be useful in identifying new directions for practice. There are many approaches to critical reflection. I draw from the field of adult education as I suggest implications for engaging practitioners in critically reflecting on their breastfeeding promotion practices in ways that incorporate dimensions of health literacy.

The term “critical reflection” is used in different ways depending on the philosophical views of the user (Brookfield 2000; Brookfield 2005b). Brookfield has described four traditions of criticality which reflect different ways in which

people bring critical reflection to their practice. The first is ideological and focuses on how people learn to recognize unjust dominant belief systems that are embedded in everyday situations and practices, and result in socio-economic inequities. Freire's work, for example, drew from this approach in its promise of social transformation. Nutbeam's notion of critical health literacy stemmed from the emancipatory approach of Freire (Nutbeam, 2000). The second tradition is rooted in psychoanalysis and emphasizes critical awareness of how psycho-cultural assumptions, acquired in childhood, influence personal learning and development as adults. The third tradition stems from analytic philosophy and logic. It pertains to skilful argument analysis using different forms of reasoning needed to distinguish between fact and bias, or opinion and evidence. The last tradition that shapes understandings of critical reflection is that of pragmatist constructivism. It emphasizes how people construct and deconstruct their own experiences and meanings. According to Brookfield, rather than accepting one universal truth, pragmatist constructivism takes into account the variability in how people interpret their experiences.

Each of Brookfield's four approaches to criticality has implications for how practitioners can critically reflect on their breastfeeding promotion practice. Ideology critique is central to recognizing the power imbalances and structural constraints to breastfeeding. For example, practitioners who engage in critical reflection from this perspective might become more aware of the domination of a medical model in the provision of breastfeeding information and in turn, question why such priority is given to centralizing breastfeeding expertise in the perinatal clinic. More specifically, they might question the effectiveness and broader

implications of this centralization policy on the lives of rural women who must travel large distances to a perinatal clinic to access breastfeeding advice prior to and after the birth of their babies without public transportation and often in treacherous winter weather conditions. Further, practitioners who engage in ideology critique may be more likely to see their role in advancing community and social change, for example by taking an active role in advocating for policy changes to remove structural barriers to breastfeeding.

Secondly, applying a psycho-cultural approach to critical reflection of their breastfeeding promotion practice might enable practitioners to recognise a woman's ingrained cultural beliefs and deep-seated aversions to breastfeeding. More specially, such an approach could enable practitioners to understand better why there is a lack of concordance between advice they give to mothers and mothers' willingness to give breastfeeding a try.

Thirdly, an analytic and logical approach to critical reflection is consistent with the application of skills in critical appraisal needed, for example, to assess what information is credible and relevant within the barrage of contradictory information which mothers receive on infant feeding. More specifically, practitioners might be better able to distinguish between breastfeeding promotion practices that focus on providing impartial information on feeding options to enable an informed choice, and those that provide selective information to persuade mothers to breastfeed. Moreover, these practitioners might also see the value of helping their clients to develop their skills in critical appraisal.

Lastly, the pragmatic constructivist approach to critical reflection is consistent with the viewpoint that there is not just one way to look at the experience of breastfeeding. Applying this approach to critical reflection might assist practitioners as they talk with women about their expectations and their experiences with respect to breastfeeding. Such an approach could make it easier for practitioners to situate their information in a way that acknowledges that, although there are scientific based recommendations supporting breastfeeding, women first and foremost need to make sense of the experience of breastfeeding within the context of their lives and their capacity to act on expert advice. Ultimately a pragmatic constructivist view would see that “informed choice” is a free choice based on balanced information.

In general, critical reflection could help practitioners clarify and question taken for granted assumptions underlying their breastfeeding promotion practices and perhaps resolve some of the tensions revealed in my examination of their practices in relation to various dimensions of health literacy. There appears to be a need to develop educational opportunities for practitioners to develop skills in critical reflection which they can bring to their breastfeeding promotion practices in a way that incorporates dimensions of health literacy appropriate to their practice.

7.3.2 Identifying opportunities for practice development

If practitioners are to incorporate health literacy into their breastfeeding promotion practice, they need opportunities to engage more fully with the multiple dimensions of health literacy. Attention should be given to determining the most appropriate and feasible ways to meet the needs of the wide array of practitioners

involved in the practice of promoting and supporting breastfeeding. Consideration should be given to identifying what opportunities currently exist for integrating health literacy into breastfeeding education for practitioners. There are a few examples reported in the literature of efforts directed to practice development in the areas of breastfeeding or health literacy. None were found which focused explicitly on integrating health literacy into breastfeeding promotion although there are some useful resources in each of the areas of breastfeeding and health literacy which may serve as models for future development.

In a study aimed at identifying the needs for breastfeeding training of practitioners in the UK, Smale et al. (2006) reported that women placed priority on the communications skills of their practitioners. Women in her study emphasized the need for practitioners to understand and take into account the emotional aspects of breastfeeding. This finding suggests implications for incorporating dimensions of health literacy into practitioners' education, in particular as it relates to notions of interactive health literacy. Within the Canadian context, a curriculum on breastfeeding has been developed in Ontario (Ontario Public Health Association (OPHA) Breastfeeding Promotion Workgroup 2004) and a committee in Nova Scotia has recently been convened to look at a breastfeeding curriculum for practitioners.

One innovative approach to supporting health literacy practice development undertaken by Rudd and colleagues at the Harvard School of Public Health has been their Health Literacy Study Circles (Rudd et al. 2005). Rudd has emphasized the need for practitioners from the fields of literacy and health to work with each

other in bringing a health literacy approach to their respective areas of practice (Rudd 2002). Guides for health literacy study circles were created by educators and researchers in the fields of public health and adult education for use in professional development, and also for facilitation of peer groups in the development of curricula focused on health literacy skills (Rudd et al. 2005). One promising Canadian example of collaboration of health and literacy practitioners, which has implications for practitioners involved in breastfeeding promotion, has been the development of a health module for the Foundations in Family Literacy Program at the Centre for Family Literacy in Edmonton, Alberta. This national training module was designed by and for practitioners in health and family literacy (Dionne-Coster, Sauve and Shively 2008) and referred to the example of breastfeeding promotion. Creating more opportunities for practitioners from the fields of health and literacy to work together on addressing family issues, such as breastfeeding, may help practitioners from both fields of practice to develop a better understanding of how health literacy can be incorporated into practice as well as policy guiding practices. Practitioners may be well positioned in their various organizations and communities to influence the development of effective policies which incorporate aspects of health literacy. Health literacy policies, such as the one adopted by the health district in this case study are more likely to be used in guiding practice if they are meaningful to practitioners and seen as relevant to the particular practice issue.

There has been little evaluation of health literacy interventions (King 2007) and the literature in measuring health literacy is still emerging. Therefore, there is not a substantial base of evidence supporting measures that practitioners can take to

integrate various dimensions of health literacy into their practice—and none regarding breastfeeding promotion practices specifically. More research and evaluation is needed to build the evidence base for health literacy practice in various areas of health promotion practice, including breastfeeding. This brings me to my final point which focuses on the involvement of practitioners in the future development of health literacy as a relevant area of theory and practice.

7.3.3 Contributing to health literacy concept development

Practitioners did not talk easily about health literacy as they described their practices even though the majority reported being aware of the term and that the issue of health literacy had been recently addressed within the health district. Findings suggest that health literacy has not been widely incorporated into practitioners' approaches to their breastfeeding practice. There appears to be a gap between concept and practice in that while practitioners may have heard about health literacy, it appears not to have penetrated their way of practice. This gap is perhaps not surprising given the diverse definitions and emerging conceptual frameworks reported in the literature. Practitioners' lack of awareness of a universal definition of health literacy is evident when one looks at the diversity in meaning that practitioners attributed to the term 'health literacy' (see section 6.5).

As pointed out in my review of the literature, health literacy is a complex and highly contested concept (see section 2.2.4, p.48). I contend that there is a need to direct attention not only to practice development but also to development of the concept of health literacy. As Baker (2006) noted, "Ironically, as the field of health literacy has expanded in scope and depth, the term 'health literacy' itself

has come to mean different things to various audiences and has become a source of confusion and debate” (p.878). Instead of focusing solely on what measures practitioners should take to alter their practice in order to incorporate notions of health literacy, consideration should also be directed to reworking the concept of health literacy, and perhaps discussing how various definitions are reflective of different ideologies. Further conceptual development, both of health literacy and one’s own philosophy of practice, may be needed before practitioners can fully incorporate understandings of health literacy into their practice. O’Neill et al. (2007), in citing Moon, emphasized the importance of critical reflection in the integration of health promotion theory and practice when they said, “Not only does reflection expand the professional’s tacit knowledge toolkit for problem solving, it can contribute to theory development, self-development (as a professional and individual), and decision making” (p.303).

Findings from this study suggest that there is much to learn about incorporating dimensions of health literacy into health promotion practice, using the promotion of breastfeeding as one case. I suggest that practitioners have an important role to play in determining whether and how concepts of health literacy can be integrated into their practice. This could be accomplished, for example, by

- implementing and evaluating breastfeeding promotion interventions which reflect the various dimensions of health literacy,
- sharing lessons learned as practitioners integrate health literacy into their practice, and
- contributing to the further development of conceptual frameworks for health literacy.

This last point is consistent with the literature calling for further development of a health literacy conceptual framework and a common definition to guide future

research, policy and practice. As noted by the IOM, “both a commonly accepted definition and a conceptual framework will contribute to the clear understanding of health literacy” (2004, p.36). While it is highly unlikely, and not necessarily desirable, to have one universal definition of health literacy, there may be some value in seeking an acceptable set of definitions. According to Laverack (2004), without having shared meanings of key concepts—such as health literacy—it is difficult to communicate and share ideas with other practitioners about how practices can evolve. Moreover, without clear conceptual understandings of health literacy, it is difficult to develop operational definitions needed to develop ways to measure health literacy (Baker 2006; Rootman, Frankish and Kaszap 2007).

This thesis has illustrated how models for health literacy have emerged out of two conflicting approaches to health interventions, the clinical/medical approach and the public health approach. The case of breastfeeding promotion reflects the convergence of these two approaches as practitioners from medical and community-based practice settings work towards the goal of increasing breastfeeding rates in their health district. If practitioners are expected to engage in practices that enhance health literacy, then there must be some shared understanding about what it is.

Nutbeam drew on Paulo Freire’s idea of “critical consciousness” as he challenged practitioners to “communicate in ways that invite interaction, participation and critical analysis” (2000, p.264). Freire argued for the synthesis of theory and practice such that people could become engaged in both reflective action and

active reflection. He took an approach to education that was intended to encourage people to take a broader stance in framing their problems, one oriented towards ‘I wonder’ instead of merely ‘I do’ (Friere 1976 as referred to in Taylor, 1993). This viewpoint is consistent with engaging practitioners in critical reflection, not only for the purposes of developing their practice in a way that may integrate notions of health literacy but also for contributing to further conceptualization of health literacy.

7.4 Summary and conclusion

In this chapter, I examined implications for practice emerging from findings presented in the previous three chapters. First, I identified ways in which practitioners could integrate various notions of health literacy described in the current literature in their breastfeeding promotion practice. These measures related to functional health literacy, interactive and critical health literacy, and health literacy as composed of scientific, cultural and civic literacies. I then, however, suggested that it was not enough to identify what practitioners should do to incorporate notions of health literacy into their practice, but that they needed to become engaged in critical reflection so they could determine the implications of applying dimensions of health literacy to their practice. I contended that practitioners’ engagement in critical reflection of their breastfeeding promotion practices through the multidimensional frame of health literacy could contribute both to development of their practice as well as to the further conceptual development of health literacy.

Chapter 8

Conclusion

8.1 Introduction

This thesis has examined the extent to which dimensions of health literacy, as depicted in the current literature, are reflected in the described and observed practices of professional and lay practitioners involved in the promotion of breastfeeding. I agree with authors such as Grabill (2003) who argue that health literacy, like literacy, is best understood within the context of practice. By examining practices, as described by practitioners, I have been able to identify difficulties and dilemmas in operationalising health literacy in the case of breastfeeding promotion. I have also been able to identify implications for incorporating dimensions of health literacy into breastfeeding promotion practice.

Findings from this study are situated within the context of two policies intended to give direction to practitioners involved in providing health information and services to individuals and population groups within the rural health district in which it is set. One policy calls for practitioners to provide information to promote and support breastfeeding. The other policy recognizes health literacy as a health determinant and aims to ensure that practitioners meet the literacy needs of all members of the population it serves.

In this concluding chapter, I discuss key findings and significance of the study, strengths and limitations of the research, and directions for future research.

8.2 Key findings and significance of the study

The timeliness of this study adds to the significance of its findings since the emergence of health literacy is a growing issue within both academic and practice circles. The concept of health literacy is a matter of considerable debate in the literature. As in the literature, there was no universal or shared definition of health literacy identified in practitioners' talk. When asked about the meaning of health literacy at the end of the interview, practitioners offered a wide range of views. There was little evidence that practitioners were familiar with specific definitions of health literacy in the literature. Nevertheless, their descriptions of practices reflected various approaches to health literacy including functional health literacy, interactive and critical health literacy, and health literacy as composed of multiple literacies.

Whereas practices directed to enhancing functional health literacy are fundamentally important in enabling women to access information they can understand, reported practices tended to focus on individuals' literacy deficiencies, not on strengthening their capacity to use information in making choices about infant feeding. The focus of functional health literacy on the deficiencies of clients, not on their capacities, appeared to be limiting in addressing the complexities of practices related to the promotion of breastfeeding. One cannot argue against the importance of finding ways to accommodate clients whose literacy skills are not adequate to meet the situational demands placed on them. It would appear, however, that an individualized approach to health literacy carries the burden of stigmatizing those with limited literacy skills. Findings from

this case study suggest that the incorporation of a functional health literacy approach to breastfeeding promotion practice is not adequate. Rather, integrating notions of health literacy into breastfeeding promotion practices which are more consistent with capacity building is needed.

Nutbeam's ideas of interactive and critical health literacy reflect a capacity building approach which, according to findings from this study, is more in keeping with practices addressing complex public health issues such as breastfeeding. However, my findings also revealed a number of challenges in operationalising the concepts of interactive and critical health literacy.

Practitioners' emphasis on providing information to childbearing women and mothers encouraging them to breastfeed appeared to sideline efforts to strengthen their capacity to act on this information. Descriptions of practices aimed at addressing socio-cultural and economic constraints to breastfeeding were most noticeably lacking. Little mention was made of practices reflecting notions of critical health literacy, either from a critical appraisal or emancipatory stance. Practitioners' descriptions of practices reflected some aspects of interactive health literacy, particularly through the importance that practitioners placed on their relationship with clients as they provided them with breastfeeding information. Fundamental assumptions about practices directed to informing choice and normalizing breastfeeding were put to the test, however, when compared with Nutbeam's key suggestions for practice— including respecting the experience women bring to their infant feeding choice, understanding the context in which they make and can act on these choices, and respecting their independence in choosing how to feed their babies. Particularly noticeable were reported practices

which were not consistent with fostering personal autonomy related to mothers' choice of feeding. Instead, these often reflected a moral judgement of a mother's choice not to breastfeed.

Looking through the lenses of interactive and critical health literacy appeared particularly useful in calling to question some taken for granted assumptions underpinning breastfeeding promotion practices. Findings suggested that applying Nutbeam's idea of interactive health literacy may be useful in helping practitioners address the tensions and dilemmas that they encounter in their interactions with clients. In addition, engaging with the notion of critical health literacy may allow practitioners to frame their breastfeeding promotion practice within the context of social disparities and health inequalities. A critical health literacy approach appears essential in order for practices to shift from an individualized focus on a mother's informed feeding choice to one which recognizes the need for efforts to address socio-cultural constraints to breastfeeding. In addition, a critical health literacy approach is in keeping with practices which encourage the development of skills in critical appraisal required to deal with the barrage of contradictory information about infant feeding that women are bound to confront in today's society.

A constant theme cutting across practitioners' talk was the suggestion that there are multiple ways of knowing about breastfeeding. Some practitioners contended that literacy was more than being able to read and write; it was also about different ways of learning. Tensions between experiential knowledge and scientific knowledge became apparent as practitioners referred to the confusion

childbearing women and mothers experience when they receive inconsistent information from practitioners with different training and experience in breastfeeding. Practitioners' descriptions of practices reflecting application of scientific, cultural, and civic literacies to their breastfeeding promotion practice focused more on health literacy as a quality of practitioners and less on ways that they, as practitioners, could enhance scientific, cultural or civic understandings of their clients and the public. This point is consistent with the finding mentioned earlier that practices tended to be directed more to transmission of breastfeeding information to women and not to strengthening their capacity to act on information through enhancing their interactive and critical health literacy.

A multiple literacies approach to health literacy represents an extension from Nutbeam's model. It too was found to have implications for breastfeeding promotion practice. The scientific domain of health literacy could be considered to help women sort through scientific arguments used to verify the value of breastfeeding, while the cultural domain has the potential to help them understand how socio-cultural circumstances and normative beliefs about breastfeeding influence feeding choices. Such critical analysis can allow mothers and practitioners to move beyond acceptance of the claim that breastfeeding is the normal and "right" way for women to feed their babies, and avoid judging women who deviate from this new "norm". Furthermore, civic literacy could be useful in enabling practitioners to broaden their breastfeeding promotion practices beyond their focus on individual choice to incorporate ways in which policy makers and citizens can be engaged in creating supportive environments so women can more easily act upon their choice.

Although there is little evidence that practitioners have fully engaged with notions of health literacy as described in the literature, these findings suggest that there are opportunities for incorporating dimensions of health literacy into breastfeeding promotion practice. This study's examination of practices through the multi-faceted concept of health literacy has proven to be useful in identifying ways that practitioners could redirect their practice from its current emphasis on transferring breastfeeding information to women towards strengthening their capacity to act on it. Practitioners in focus group interviews in which preliminary findings were discussed affirmed that, although there were a number of challenges at the system and practitioner levels, there was a clear need to redirect current practices and that a health literacy framework offered a promising approach.

The lack of attention to practices which address the material and social constraints to breastfeeding was pronounced in this study. The fact that rates of breastfeeding initiation have been gradually increasing while duration rates continue to lag behind suggests that interventions need to be extended beyond convincing women to try breastfeeding to enabling them to secure the personal and environmental supports to continue. Findings from this study suggest that a capacity building approach to health literacy could be useful in the development of future breastfeeding interventions.

Breastfeeding promotion practice has provided a relevant case in which to examine the extent to which dimensions of health literacy described in the literature are operationalised. One of the contributions of this study has been the identification of ways practitioners could potentially incorporate dimensions of

health literacy into an area of practice which crosses medical and public health models of practice, different disciplines, and lay and professional practice. A particularly novel addition to the emerging literature on health literacy is the examination of practices which involve practitioners from both medical and public health models of practice working together on a common health concern. The bulk of the literature has focused on the application of health literacy within clinical settings. As practitioners engage in addressing the health literacy concerns of their populations, these competing approaches to health literacy are likely to become even more apparent and a source of tension. Recognizing that health literacy is a multidimensional concept which reflects different paradigms may help practitioners from different disciplines working in clinical and non-clinical settings identify some of the tensions that have the potential to jeopardize their collaboration and the success of their interventions. At the root of some of these tensions are ideological differences among practitioners which may speak to some of the challenges that many practitioners have in addressing issues related to social and health inequalities. For example, engaging in an emancipatory approach to critical health literacy would not likely be accepted by health practitioners who see their fundamental role as meeting the immediate health concerns of their clients rather than becoming activists for social change.

At its simplest, health literacy can be thought of as the skills needed to enable the access, understanding and use of information for health. As noted in Chapter 2, most definitions incorporate these three core elements. An exception, however, is the operational definition developed by a team of researchers in Canada led by Rootman. They have contended that core elements of health literacy are “access,

understand, assess, and communicate” (Rootman, Frankish and Kaszap 2007, p.69) which, in turn, they suggest may be related to the “use” of information along with other outcomes. Findings from this case study pertaining to breastfeeding promotion have highlighted the problematic nature of “use” of information as part of a health literacy definition. As my findings revealed, many of the tensions in reported practices reflected concerns about mothers’ use of information as provided by their practitioners and the extent to which mothers acted upon it in their choice of infant feeding method.

This concern about use of information centres on the extent to which understandings of health literacy reflect a focus on the individual’s compliance with information provided. In particular, the high rates initiation compared to duration of breastfeeding suggests that while women exhibit their use of information in “giving breastfeeding a try”, they do not continue breastfeeding in accordance with recommendations concerning its duration. Findings from this study suggest that more discussion is needed about the extent to which ideas of health literacy are consistent with the fundamental health promotion assumption of respect for personal autonomy in thought and action. Few studies have provided empirical evidence showing difficulties with some fundamental assumptions underlying definitions of health literacy in the literature.

8.3 Strengths and limitations of the study

By using a qualitative research approach, this study was able to provide an in-depth examination of the extent to which practitioners have integrated dimensions of health literacy within one area of practice through the case of breastfeeding

promotion. While Canadian health practitioners have been reported to have limited awareness of health literacy (Rootman and Gordon-El-Bihbety 2008), this research has taken a closer look at the extent to which a selection of practitioners from different disciplines incorporate notions of health literacy into their practice. This case study resulted in the identification of difficulties in operationalising the concept of health literacy as well as opportunities for integrating dimensions of health literacy into practice. Findings provide a base for further exploration of the incorporation of the concept of health literacy in breastfeeding promotion, and in other areas of health promotion practice.

The setting in which this case study was undertaken was well selected for a number of reasons. For example, GASHA had put into place district-wide policies to address the priorities of health literacy and breastfeeding. At the time of the study, GASHA was the first known health district in Canada to adopt a health literacy policy. Similarly, managers were committed to addressing the issue of breastfeeding by developing the organizational and policy support to guide practice. Practitioners from multiple disciplines were involved and experienced in the promotion of breastfeeding throughout this health district. Managers in the health system were accepting of my request to interview practitioners and to observe practices in selected settings.

There are, however, limitations to this study. In spite of drawing data from just one health district, I was able to conduct interviews with practitioners from a range of disciplines and to observe practices in three different practice settings. I attempted to access interview participants who reflected the wide variety of

practitioners from different disciplines and sectors involved in breastfeeding promotion efforts. I consulted with staff managers in public health and maternity care to identify practitioners who were more directly involved in breastfeeding promotion practice, and I attempted to reach those in practice settings throughout the district. Because of the small number of specialists, such as obstetricians and paediatricians, there are few in my sample (see section 3.5.1.3, p.133). Rural physicians were not well represented in my sample. My difficulty in accessing them as interview participants was not surprising given comments by several practitioners that rural physicians are not well integrated into perinatal health services throughout the district and difficult to engage. A limitation of conducting the study in the selected health district was that there were few lay practitioners involved in the promotion of breastfeeding. Although I would suggest that this reflects the emphasis placed on professionalized practice, a study set in another setting with more lay practitioners would likely provide insights about health literacy as it relates to breastfeeding promotion from both lay and professional perspectives.

This study was undertaken in a rural health district in which practitioners are likely to know each other, particularly within the same area of practice. i.e. breastfeeding promotion. Being known on a professional basis by several of the practitioners whom I interviewed was helpful in gaining access to them and engaging them in talking about their practices. It is possible that our familiarity influenced their responses, although there were no obvious examples that this was the case. As noted on Chapter 3, transparency in the presentation of findings is a key aspect of striving for rigour in qualitative research (see section 3.8, p.168).

My efforts to protect the anonymity of participants constrained to some extent the amount of descriptive detail about specific practitioners I was able to give the reader when presenting findings in this thesis. I did however provide extensive quotes and contextual descriptions within the confines of protecting anonymity.

While the addition of observational data contributed to the strength of my analysis of described practices, I was limited in the time I could spend in observation in various settings largely because of the heavy demands of practice of the various practitioners. Nevertheless, the observational data I collected provided valuable contextual information throughout my analysis of interview data.

Lastly, the conceptual ambiguity and lack of empirical support in the literature describing dimensions of health literacy, coupled with ambivalence about literacy in practitioners' descriptions of their breastfeeding promotion practices, has made analysis of findings particularly challenging. Whereas most practitioners were eager to talk about their practices and open about their difficulties in encouraging women to breastfeed, they frequently hesitated when asked "so what about health literacy?" Despite what appeared to be their uncertainty about health literacy, they provided rich descriptions of their practices and many candid comments about their concerns about addressing low literacy among their clients.

Opportunities to observe practices enabled me to understand better the context in which they undertook their efforts to promote and support breastfeeding. The combination of observational and interview data, including personal and focus group interviews with mothers and practitioners, contributed to the complexity of the research process but strengthened the final analysis.

8.4 Directions for future research.

This study has been undertaken at a time when health literacy is emerging as a lively area of research within public health and health promotion. Based on my involvement in this research, I offer several suggestions for future research.

Maternal and child health is a particularly promising area for exploring health literacy. For example, better understandings of health literacy can contribute to the development of practices aimed at addressing maternal and child health disparities. Health literacy as it relates to professional and lay practice is also an area worth pursuing, particularly with respect to the application of experiential knowledge in the provision of breastfeeding information. There is evidence in the literature on the value of peer and lay advice in supporting breastfeeding but not with health literacy in mind. Similarly, there is more to learn about the role of informal learning in the provision of breastfeeding information and implications for creating informal learning opportunities for childbearing women and mothers. Lastly, but most importantly, exploring dimensions of health literacy as it relates to mothers' infant feeding choices would complement findings from this study which has focused on practitioners.

Exploring implications of dimensions of health literacy in diverse health practice settings and within the context of efforts to address other complex public health issues could contribute to a better understanding of the place of health literacy in public health and health promotion practice. One example which builds on findings from this study of breastfeeding promotion is the examination of the extent to which dimensions of health literacy are reflected in practitioners'

approaches to addressing obesity during early childhood—an issue involving the provision of information from varied sources and of significant public health concern internationally.

The need for more evaluation of health literacy interventions has been identified as a priority in Canada (Rootman and Gordon-El-Bihbety 2008). I suggest that there is a need to develop health literacy frameworks which can be applied to evaluating health promotion interventions aimed at enabling individuals to access, understand and use information for health. The example of interventions directed to breastfeeding promotion is but one example. As I noted in Chapter 1, Rootman, Frankish and Kaszap (2007) have suggested that the introduction of health literacy into the field of health promotion has the potential to change the way practitioners organize their work. If this is indeed the case, evaluation of health literacy interventions is critical to the future development of health promotion practice.

A better understanding of the barriers that health and other systems pose to health literacy and their impact on efforts to incorporate health literacy into policy and practice is needed. Research should be directed to examining the health literacy implications of current and emerging policies and practices relevant to health promotion issues in Canada. For example, to what extent do practices and policies enhance health literacy or, by default, contribute to further disparities? What are the barriers to incorporating health literacy into practice in various practice settings, in various organizations, and among various disciplines? What are the particular challenges to enhancing health literacy in rural areas?

I concur with claims in the literature that more work is needed in defining health literacy conceptually and operationally (Baker 2006; Institute of Medicine (IOM) 2004; Rootman, Frankish and Kaszap 2007). Developing coherent conceptual frameworks that reflect the many facets of health literacy and expanding ways of measuring health literacy at the population level could contribute to public health practice. In my opinion, more attention needs to be paid to participatory approaches to health literacy research. As argued in the previous chapter, practitioners can make a significant contribution to the future development of health literacy theory and practice by engaging in critical reflection and by creating opportunities for research in practice. Findings from this study affirm the contested state of health literacy, both in theory and in practice, and suggest that health literacy will continue to be a vigorous source of debate for some time to come. This debate is healthy and should be considered an invitation for further research.

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Appendix A: Breastfeeding policy- Nova Scotia



Health

Health Promotion
and Protection

POLICY STATEMENT

SUBJECT: Breastfeeding in Nova Scotia: Responsibilities of the Nova Scotia Department of Health and the Nova Scotia Department of Health Promotion and Protection

<i>Approval Date:</i>	September 2005	<i>Page: 1</i>
<i>Updated:</i>	June 2006	
<i>Approved by:</i>	Department of Health, Senior Leadership Team Nova Scotia Health Promotion, Executive	
<i>Effective by:</i>	October 2005	

I. POLICY STATEMENT

The Department of Health and the Department of Health Promotion and Protection hold a firm and unequivocal position in favour of breastfeeding and communicates its position both within government, the health system, to health system providers as well as the general population. Such an affirmation provides a fundamental point of reference for all provincial government and health system funded practitioners and staff.

II. DEFINITIONS

Baby Friendly Initiative: An international program established by the World Health Organization and UNICEF to promote, support and protect breastfeeding worldwide in hospital and in the community. Three evidence-based documents provide the foundation for the Baby Friendly Initiative: The Baby Friendly Hospital Initiative; The Seven Point Plan for the Protection, Promotion & Support of Breastfeeding in Community Health Services and; The International Code of Marketing of Breastmilk Substitutes

International Code of Marketing of Breastmilk Substitutes: The International Code was adopted by a resolution of the World Health Assembly (of which Canada is a member state) in 1981. The Code bans all promotion of formula and sets out requirements for labeling and information on infant feeding. Any activity that undermines breastfeeding also violates the aim and spirit of the code.

Breastfeeding Committee for Canada: Established in 1991 as the national authority for the Baby Friendly Initiative in Canada, with a mandate to oversee and facilitate the implementation of the Baby Friendly Initiative.

Breastfeeding Initiation and Duration: Exclusive breastfeeding is recommended for the first six months of life for healthy term infants with continued breastfeeding for up to two years & beyond with the introduction of complementary foods at six months. (Health Canada 2004 - endorsed by Canadian Pediatric Society, Dietitians of Canada, College of Family Physicians of Canada)

III. POLICY OBJECTIVES

- Provide leadership for the protection, promotion and support of breastfeeding
- Improve the health status of mothers and babies by increasing breastfeeding initiation & duration in Nova Scotia
- Support the implementation of the Baby Friendly Initiative

IV. POLICY APPLICATION

The policy applies to Department of Health, Department of Health Promotion & Protection, District Health Authorities, the IWK Health Centre and all health system funded providers.

V. POLICY DIRECTIVES

- 5.1 The Department of Health and the Department of Health Promotion & Protection state its position on breastfeeding, consistent with "Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines" and the Public Health Services: Infant Feeding Position Statement. Make it known and applied at every level within the health system. To this end, the Department of Health and the Department of Health Promotion and Protection, will, in part, through the Provincial Breastfeeding and Baby-Friendly Initiative Committee:
- appoint a person to coordinate breastfeeding and the Baby-Friendly Initiative at the provincial level;
 - integrate breastfeeding into all government programs relating to child health;
 - ensure that information on breastfeeding and infant feeding is standardized and updated in provincial documents or services to which parents and professionals refer (i.e. A New Life, Breastfeeding Basics, Year One Food for Baby, After Year One Food for Children, etc.);
 - include and maintain information on breastfeeding, including the position of the Department of Health and the Department of Health Promotion and Protection, to its website;
 - ensure the development and use of standardized infant feeding assessment and care planning tools by providers throughout the health system.

- 5.2 Put in place the conditions (time, space and support) necessary to facilitate breastfeeding by employees of the Department of Health and the Department of Health Promotion and Protection and work to ensure the same across government.
- 5.3 Ensure that social policies (interdepartmental and cross-sectoral) that promote breastfeeding are maintained and improved.
- 5.4 Establish a breastfeeding social marketing strategy aimed at the general population.
- 5.5 Promote the implementation of the Baby-Friendly Initiative (BFI) through a provincial committee (Provincial Breastfeeding and BFI Committee). The following are included within the mandate of the committee:
 - I. provide leadership for the protection, promotion and support of breastfeeding;
 - II. support the implementation of the Baby-Friendly Initiative within Nova Scotia, in partnership with the Breastfeeding Committee of Canada (BCC), the National Authority for the Baby-Friendly Initiative (BFI);
 - III. make known the Ten Steps to Successful Breastfeeding and the Seven Step Plan for the Protection, Promotion and Support of Breastfeeding in Community Health to health system funded organizations and agencies;
 - IV. distribute to health system funded facility and organization administrators appropriate information concerning programs aimed at protecting, promoting and supporting breastfeeding (e.g. BFI);
 - V. assume responsibility, in collaboration with the organizations concerned (e.g. WHO, UNICEF, the Breastfeeding Committee for Canada, etc.), for the certification of baby-friendly facilities and for recommendations made to the Department of Health and the Department of Health Promotion and Protection for the granting of the designation;
 - VI. build commitment throughout the province for breastfeeding and to implement the BFI so that breastfeeding will be the cultural norm for infant feeding in Nova Scotia.
- 5.6 Encourage the application of the International Code of Marketing of Breastmilk Substitutes, which implies:
 - I. Include in policy relating to ministerial publications, both written and audiovisual, the obligation to respect the Code, while emphasizing that breastfeeding is the normal method of infant feeding. Images representing bottle-feeding, baby bottles, nipples or commercial infant feeding formula (artificial milk) should not be used unless absolutely necessary;
 - II. Ensure that policies relating to government publications are respected, and using influence on other Departments to ensure that the Code is respected.

- 5.7 With the Provincial Committee and the District Health Authorities/IWK Health Centre, support the implementation of tools e.g. infant feeding/nutrition assessment & care planning tool (under development) and activities, such as, individual breastfeeding support, community capacity building e.g. peer support groups, local coalitions/networks, by DHAs and other health system funded organizations and agencies.
- 5.8 With the Provincial Committee, encourage all professional bodies to ensure that universities, community and vocational colleges offer students who will be future health professionals, adequate theoretical and practical training in the area of breastfeeding.
- 5.9 Ensure the development and implementation of a provincial breastfeeding surveillance system using standardized definitions and timelines (initiation and duration) developed and approved by the Breastfeeding Committee for Canada. [Consistent with “Healthy Babies, Healthy Families” infant feeding and growth (i.e. height and weight) should be monitored at 3-7 days of age, ten to fourteen days of age and at one month.]
- 5.10 Regularly monitor progress towards achievement of the BFI in Hospitals and Community Health Services across the province.

VI. ACCOUNTABILITY

Department of Health, Department of Health Promotion & Protection, District Health Authorities, the IWK Health Centre and all health system funded providers are responsible for the implementation of the policy.

VII. MONITORING

Monitoring tool(s) and processes will be developed in collaboration with District Health Authorities and the IWK Health Centre.

VIII. REFERENCES


Healthy Babies, Healthy Families: Postpartum & Postnatal Guidelines (2002)
Healthy Eating Nova Scotia (2005)

IX. ENQUIRIES

Enquiries about this policy should be directed to:

Name: Michelle Amero (424-3749) or Kathy Inkpen (424-4391)
Nova Scotia Department of Health Promotion and Protection

Appendix B: Breastfeeding policy – GASHA

Guysborough Antigonish Strait Health Authority	POLICY NUMBER: 5 – 10 PAGE NUMBER: 1 of 2
Policy & Procedure Manual: Children's & Women's Health	Subject Title: Post-Partum Care
Issued By: GASHA	Subject Subtitle: Breast Feeding
Approved By: 	Original Date: September 2002
	Review Date: May 9, 2003, May 9, 2006, January 5, 2008

POLICY

Guysborough Antigonish Strait Health Authority (GASHA) holds a firm and unequivocal position in favor of breastfeeding and communicates its position both within the health system to health system providers as well as the general population. Such an affirmation provides a fundamental point of reference for all District employees.

I. DEFINITIONS

Baby Friendly Initiative: An international program established by the World Health Organization and UNICEF to promote, support and protect breastfeeding worldwide in hospital and in the community. Three evidence-based documents provide the foundation for the Baby Friendly Initiative: The Baby Friendly Hospital Initiative; The Seven Point Plan for the Protection, Promotion & Support of Breastfeeding in Community Health Services; and The International Code of Marketing of Breast Milk Substitutes.

International Code of Marketing of Breast Milk Substitutes: The International Code was adopted by a resolution of the World Health Assembly (of which Canada is a member state) in 1981. The Code bans all promotion of formula and sets out requirements for labeling and information on infant feeding. Any activity that undermines breastfeeding also violates the aim and spirit of the code.

Breastfeeding Committee for Canada: Established in 1991 as the national authority for the Baby Friendly Initiative in Canada, with a mandate to oversee and facilitate the implementation of the Baby Friendly Initiative.

Breastfeeding Initiation and Duration: Exclusive breastfeeding is recommended for the first six months of life for healthy term infant with continued breastfeeding for up to two years & beyond with the introduction of complementary foods as six months. (Health Canada 2004 – endorsed by Canadian Pediatric Society, Dietitians of Canada, College of Family Physicians of Canada).

Appendix B continued...

POLICY OBJECTIVES

- Provide leadership for the protection, promotion and support of breastfeeding
- Improve the health status of mothers and babies by increasing breastfeeding initiation & duration in GASHA
- Support the implementation of the Baby Friendly Initiative

POLICY APPLICATIONS

The policy applies to Guysborough Antigonish Strait Health Authority facilities, programs/departments and staff.

POLICY DIRECTIVES

GASHA states its position on breastfeeding, consistent with "Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines" and the Public Health Services: Infant Feeding Position Statement. Make it known and applied at every level within GASHA. To this end, GASHA will, in part, through the GASHA BFI:

- Appoint a person to coordinate breastfeeding and the Baby-Friendly Initiative at the district Level;
- Integrate breastfeeding into all district programs relating to child health;
- Ensure that information on breastfeeding and infant feeding is standardized and updated in GASHA documents or services to which parents and professionals refer;
- Include and maintain information on breastfeeding, including the position of GASHA to be communicated on its website.
- Ensure the use of provincially developed standardized infant feeding assessment and care planning tools by providers throughout the health system.
- Put in place the conditions (time, space and support) necessary to facilitate breastfeeding by employees of GASHA.
- Ensure that social policies (interdepartmental and cross-sectoral) that promote breastfeeding are maintained and improved.
- Establish a breastfeeding social marketing strategy aimed at the general population.
- Promote the implementation of the Baby-Friendly Initiative (BFI) through the district BFI committee. The following are included within the mandate of the committee.

Appendix B continued...

1. Encourage the application of the International Code of Marketing of Breast Milk Substitutes which implies:

Include in policy relating to district publications, both written and audiovisual, the obligation to respect the Code, while emphasizing that breastfeeding is the normal method of infant feeding. Images representing bottle-feeding, baby bottles, nipples or commercial infant feeding formula (artificial milk) should not be used unless absolutely necessary; Ensure that policies relating to district publications are respected.

2. With the Provincial Committee and the District Health Authorities Health Centre, support the implementation of tools e.g. infant feeding/nutrition assessment & care planning tool (under development) and activities, such as, individual breastfeeding support, community capacity building e.g. peer support groups, local coalitions/networks, and other health system funded organizations and agencies.
3. Ensure the development and implementation of a district breastfeeding surveillance system using standardized definitions and timelines (initiation and duration) developed and approved by the Breastfeeding Committee for Canada. [Consistent with "Healthy Babies, Healthy Families" infant feeding and growth (i.e. height and weight) should be monitored at 3-7 days of age, ten to fourteen days of age and at one month.] The surveillance system will contribute to the Provincial Surveillance System.
4. Regularly monitor progress towards achievement of the BFI in Hospitals and Community. Health Services across the district.

ACCOUNTABILITY

All district employees are responsible for the implementation of the policy.

MONITORING

Monitoring tool(s) and processes will be developed in collaboration with the other DHA's, Department of Health, Health Promotion and Protection and the IWK Health Centre.

REFERENCES

Healthy Babies, Healthy Families: Postpartum & Postnatal Guidelines (2002) Healthy Eating Nova Scotia (2005)

Appendix B continued...

Additionally and specifically for the facilities of GASHA, Families shall receive support according to the Breastfeeding Policy unless contraindicated by the health status of the infant and/or mother's or an individual mother's informed choice. Rationale for not meeting any aspect of the breastfeeding policy shall be documented in the infant's chart.

1. Families will be offered assistance by health care providers who have the knowledge, the skills and the attitude necessary to fully support breastfeeding.

- a) A welcoming atmosphere will be provided for breastfeeding families. All healthcare providers are accountable for the attitude they present regarding breastfeeding.
- b) Orientation and continuing education, which enables healthcare providers to be consistent and constructive in their support to breastfeeding families, is the mandate of the District.

2. All women and their families will receive information regarding the benefits and management of breastfeeding and be encouraged to exclusively breastfeed their babies.

- a) Feeding options other than breastfeeding are not promoted
- b) All mothers should be encouraged to exclusively breastfeed their infants for at least 6 months of life. No water, glucose water, or other fluids should be given to normal term infants under 6 months
- c) All mothers should be taught to manually express breast milk in order to maintain lactation and to feed using a cup, spoon, or dropper in case they are separated from their infants. Babies who are unable to breastfeed due to complications should be fed expressed breast milk in the hospital and at home as much as is possible or as directed by the physician.

3. Families will receive information on the benefits of skin-to-skin contact and will be provided with the opportunity for this to occur within one-half (1/2) hour of birth. They will be supported to initiate breastfeeding within the first hour of the baby's life, unless the mother's or the baby's health doesn't make this possible.

- a) Families will receive information on the benefits of early initiation of skin-to-skin contact with the baby and its positive impact on breastfeeding.
- b) Families experiencing cesarean birth will be provided with the opportunity for skin to skin contact within one hour of birth and will be supported to initiate breastfeeding within two hours of birth.
- c) Description of the skin-to-skin contact and the initiation of breastfeeding will be documented for all families.

Appendix B continued...

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4. Breastfeeding families are supported in learning to breastfeed on baby's hunger cues
- a) Families are provided with the Keys to Caregiving Program.
 - b) No restrictions are placed on the frequency or length of feeding.
 - c) In the first 24 hours, it is not unusual that babies wake to feed as few as 2-4 times or as many as 10-12 times. Encourage the mother to offer breast each time the baby arouses or begins to cue. However, if babies are not waking on their own, mothers should be instructed on how to raise a baby from one to state to another so that feeding can occur. Newborns need to feed 8-12 times in 24 hours. If baby unable or unwilling to latch in 6 hours, steps must be initiated to stimulate milk production. Manual expression of colostrum will be taught to the mother and the process used after each unsuccessful latch/stimulation.
 - d) After 24 hours, mothers are encouraged to breastfeed babies on cue, waking babies if not cueing.
 - e) Every mother and baby will be encouraged and supported to remain together to learn how to interact with each other and understand each others cues.
5. Breastfeeding families are not provided with artificial means of feeding, unless medically indicated, during hospitalization, on discharge.
- a) The use of bottles, artificial pacifiers or dummies is discouraged on the unit.
 - b) Families are informed of the impact of supplemental feeding on lactation. The informed choice of families to supplement their infant will be respected.

Appendix C: Health literacy policy – GASHA

Guysborough Antigonish Strait Health Authority	POLICY NUMBER draft PAGE NUMBER: 1 of 1
Policy & Procedure Manual: Administration & Corporate	Subject Title: Health Literacy
Issued By: GASHA	Subject Subtitle: Health Literacy Assessment Tool
Approved By:	Original Date: May, 2006
Distribution: all	Review Date: May, 2007

POLICY

The objective of this policy is to ensure the Guysborough Antigonish Strait Health Authority (GASHA) is an organization that meets the literacy needs of our population with regards to communicating health information, navigation of programs and facilities, access to programs and services and other day-to-day interactions. GASHA will also advocate to address health literacy as a determinant of health.

PROCEDURE

1. The Nova Scotia Health Literacy video is a component of our comprehensive orientation program.
2. Under the leadership of each Service Team, all units / programs / work sites conduct a health literacy audit using the Management Health Literacy Environmental Assessment Tool annually (Attachment A) and the Staff Health Literacy Environmental Assessment Tool annually (Attachment B).
3. The Service Team Leaders track and monitor compliance, gaps and actions with regards to the health literacy audits.
4. The Service Team Leaders submit a Health Literacy Summary Report to Quality Council annually.
5. The Quality Director submits an annual report to Senior Management.
6. Managers have the authority to request changes to print resources (including those produced by GASHA and elsewhere) and signage.
7. Staff have access to a range of options with regards to health information (i.e. audiocassettes, videos, pictorial symbols and plain language and easy to read format)
8. Changes to workflow within departments are at the discretion of the Manager (i.e. all intakes done verbally).

Appendix C continued...

ATTACHMENT A

Management Health Literacy Environmental Assessment Tool*

Indicate which statement most accurately describes GASHA's environment today:

- 1 We are not doing this Manager Name: _____
 2 We do this, but could improve Program area/Dept: _____
 3 We are doing this well Date: _____
 n/a Not applicable

** If you answer 1 or 2 to any of the statements below, please describe in the third column what you need in order to score a three.**

1	Our organization's name and symbol are clearly displayed on all buildings.		
2	Our phone number is easy for everyone to find on our promotional materials.		
3	The atmosphere in our reception areas is friendly. People can ask for help without embarrassment.		
4	We promote our organization in ways that allow adults with limited literacy skills to learn about our programs and services.		
5	GASHA has guidelines for limiting the level of reading difficulty for our print materials and forms.		
6	We regularly review our print materials and forms to check for readability.		
7	All staff and physicians in GASHA facilities / programs have received awareness and sensitivity training about literacy issues.		
8	All staff responsible for creating print materials have been identified and have received training in how to prepare materials in plain language.		
9	All staff and physicians who provide service in GASHA facilities have received training in clear communication techniques.		
10	We review policies and procedures to ensure literacy issues are included and considered in their writing and implementation.		

* Adapted from Literacy Alberta Audit Kit (S. Devens, A. Scott) Alberta Association for Adult Literacy 2003

Appendix C continued...

APPENDIX B

Staff Health Literacy Environmental Assessment Tool*

Indicate which statement most accurately describes your work environment today:

- 1 We are not doing this Staff Name: _____
 2 We do this, but could improve Program Area /Dept: _____
 3 We are doing this well Date: _____

n/a Not applicable

**** If you answer 1 or 2 to any of the statements below, please describe in the third column what you need in order to score a three.****

1	Clear signs and symbols direct people from the front door of the building to our offices/clinics/area/program.		
2	Our reception area is clearly marked and easy to find.		
3	Our environment provides privacy for clients to discuss confidential information.		
4	Posted information is clear and easy for adults with limited literacy to read.		
5	Our print materials are easy for adults with limited literacy skills to read.		
6	All the forms we use are easy for everyone to read and understand.		
7	We regularly review our print materials and forms to check for readability.		
8	We have materials other than printed materials that we use to communicate with clients (video, audio, pictures, etc.)		
9	We schedule appointments so that clients have enough time to ask questions or can take extra time to understand the information we give them.		
10	We check with clients to ensure they have understood the information we give them.		
11	We accommodate clients who may want to or need to bring others to their appointments.		
12	We ask all clients if they need assistance filling out forms.		
13	Our staff know about the adult literacy resources in our community and could provide a referral to those resources.		
14	Our staff are aware of health literacy issues and are sensitive to the needs of clients who are limited in literacy.		
15	We read important documents aloud (consent forms, patient instructions, preparation for tests, information about medications, etc.).		
16	Our staff is aware of behavior that may indicate a client has limited literacy.		

* Adapted from Literacy Alberta Audit Kit (S. Devens, A. Scott) Alberta Association for Adult Literacy 2003

Appendix D: Information letter and consent form for personal interview informants

Health Literacy and Infant Feeding Study

LETTER OF INFORMATION

Providers

As a health provider who works with pregnant women and new mothers within the Guysborough Antigonish Strait Health Authority (GASHA), you are invited to participate in this research study. A personal interview, held at your convenience, will focus on your perspectives about your practices related to the promotion and support of breastfeeding within the context of health literacy. In follow-up to this information letter, you will be contacted by telephone by Doris Gillis, Associate Professor, St. Francis Xavier University to discuss your participation and, if interested, to schedule an interview. Your participation in this study is strictly voluntary.

Details of Study

GASHA's lower rates of literacy ^{i,ii} combined with lower breastfeeding rates ^{iii,iv}, in comparison to other parts of Canada, provides the health context within which the research is situated. Over the last year, GASHA has been increasing health literacy awareness among its primary health providers and reviewing its policies and practices in order to meet the literacy needs of the population it serves. The central aim of this study is to examine how professional and lay efforts to increase rates of breastfeeding initiation and duration reflect dimensions of health literacy. Of particular concern in this study are activities directed to women with less education and with low literacy who may be less likely to breastfeed.

Data collection methods will include analysis of policy documents and publications providing infant feeding information to the public, in-depth personal interviews with professional and lay providers involved in breastfeeding promotion and support interventions, and site observation. Data will be collected from September 2005 until April 2006. In late spring of 2006, participants in the study will be invited to a focus group when the findings will be presented and any implications for practice identified. Two focus groups will also be held with first-time mothers to elicit their feedback on findings and identify implications from their perspectives.

Who May Participate

Interviews will be conducted with approximately 30 selected professional and lay health providers involved in various practices and activities related to promoting and supporting breastfeeding throughout the Antigonish, Guysborough and Strait area. As a participant, you will not receive any payment.

Participant Concerns

This interview will last no more than an hour. You will not be required to respond to any questions you do not wish to answer and may stop participating in the study

Appendix D continued...

at any time. All information gathered from individuals will be kept confidential. With your written consent, your interview will be audio-taped in order not to miss anything you say. Each tape will be coded with a number before being transcribed. Tapes and transcripts will be stored securely at St Francis Xavier University. At the end of the study when findings are reported, every effort will be made not to reveal the identity of individual participants. Your involvement in the study does not affect your legal rights.

Further Information

This case study is being conducted within GASHA by Doris Gillis, Associate Professor, Department of Human Nutrition, St. Francis Xavier University, as part of her doctoral research. For more information about the study, she can be contacted by telephone at 902 867 5401 or by email at dgillis@stfx.ca. The Chair of the Human Nutrition Department, Dr. Marian Naczek, can be reached at 902 867-2205 or by email at mnaczek@stfx.ca. For questions related to institutional approval of the study, Madonna MacDonald, VP Community Health, GASHA can be reached by telephone at 902 867 4262 or by email at Madonna.Macdonald@gasha.nshealth.ca.

Doris Gillis, Associate Professor
Department of Human Nutrition
St Francis Xavier University
Box 5000, Antigonish, N.S. B2G 2W5

ⁱ Statistics Canada (2005a). *Adult Literacy and Life Skills Survey 2003*. Released Wednesday May 11. Available at: <http://www.statcan.ca/Daily/English/050511/d050511b.htm> [11 May 2005]

ⁱⁱ OECD and Statistics Canada. (1996). *Reading the Future: a Portrait of Literacy in Canada*. Ottawa, ON: Statistics Canada.

ⁱⁱⁱ Statistics Canada. (2005b). *Health Indicators – 2005: Breastfeeding practices, females aged 15 to 55 who had a baby in the previous five years, Canada, provinces, territories and peer groups, 2003*. Catalogue No. 82-221, Vol 2005, No.1. Ottawa, ON: Statistics Canada.

^{iv} Nova Scotia Department of Health. (1998). *Report of the 1994 Infant feeding Survey*. Vol. 1: Discussion Document. Halifax: Province of Nova Scotia.

Appendix D continued...

CONSENT FORM

PROVIDERS

Health Literacy and Infant Feeding Study

Please initial box.

1. I have read and understood the letter of information for this study. ☐
2. I have been able to ask questions about the study. ☐
3. I understand that my participation is voluntary and I am free to withdraw from the study at any time. ☐
4. I give permission for my interview responses to be audio-taped. ☐
5. I agree to take part in this study. ☐

Name of Participant (print) Signature Date

I _____ have explained this study to the best of my ability, and I believe the participant understands what is involved in participating in the study.

Signature of Researcher (Doris Gillis) Date

**Department of Human Nutrition
St Francis Xavier University
Box 5000, Antigonish, N.S. B2G 2W5
Ph: 902 867 5401**

Appendix E: Personal interview guide

Health Literacy and Infant Feeding Study

Conversational Interview Guide

Introduction

Over the last year, the Guysborough Antigonish Strait Health Authority (GASHA) has been undertaking activities to increase awareness of health literacy among primary health providers and reviewing its policies and practices in order to meet the literacy needs of the population it serves. The purpose of this study is to better understand the concept of health literacy by examining interventions aimed at increasing breastfeeding initiation and duration among women least likely to breastfeed---an issue of priority in this district.

I am interested in learning more about maternal health literacy by exploring how professional and lay health providers enable first-time mothers in GASHA to access, understand and use information in making decisions about feeding their babies. Although maternal health literacy relates to all pregnant women and mothers, those with less education and those with low literacy are less likely to breastfeed and are thus of particular concern in this study. I would like to hear about your practices related to breastfeeding promotion and support within the context of health literacy.

Background on Participant:

Occupation: _____

Number of years of practice:

Practice in total: _____

In efforts related to infant feeding: _____

Personal Experience in infant feeding: _____

Framing the conversational interview:

This interview will take the form of a conversation in which we will talk about your efforts in promoting and supporting breastfeeding. Throughout our conversation, I will ask you to reflect on some of your experiences within the context of health literacy and to think about any implications for your practice.

To start off can you tell me if you have heard about health literacy and if so what, in general, you think about it?

Appendix E continued...

Questions guiding reflective pattern of dialogue:

1. What is your experience in ...? What happens when...? Tell me about when you... What do you do when...?
2. Why do you think this happened?
3. So what does this say about ... maternal health literacy?
4. Now what are the implications of this for your practice?

Topics to Explore

Topic	Potential Points of Discussion
Promoting and supporting breastfeeding with pregnant and first-time mothers	<ul style="list-style-type: none">• what do you think contributes to a mother's decision of whether to breast or bottle feed her baby?• enabling access to information• enabling access to services• providing easy to read materials• providing non-print resources• enabling client-provider interaction• nature of provider-client relationship• enabling women to feel confident and in control of their feeding decisions
Identifying how low literacy influences women's access, understanding and use of information in making infant feeding decisions	<ul style="list-style-type: none">• identifying clients who have difficulty reading and understanding the printed word and infant feeding advice observation? question? testing?• determining if clients understand• determining if and how they have used the information• identifying direct and indirect impact of low literacy on health (interaction of literacy with other social determinants of health)• using medical terminology<ol style="list-style-type: none">1. in printed materials and/or2. in communicating advice

Appendix E continued...

<p>Enabling mothers to feel confident in their infant feeding decisions</p>	<ul style="list-style-type: none"> • mothers' awareness of benefits of breastfeeding • awareness of new provincial policy re: breastfeeding • degree of self-confidence in feeding infant • perceived role of provider as the 'expert' • influence of lay advice • examples of how mothers assume control by resisting 'expert advice' • examples of how provider's practices enabled maternal empowerment
<p>Addressing barriers to breastfeeding</p>	<ul style="list-style-type: none"> • barriers to breastfeeding: personal? social? cultural? • literacy as a barrier to breastfeeding (direct and indirect effects) • examples of how mothers managed or changed situation which prevented adherence to advice • examples of activities aimed at reducing barriers that prevent women from breastfeeding... community? district-wide actions? collaborative efforts involving mothers
<p>Using diverse health promotion interventions/strategies to promote breastfeeding</p>	<ul style="list-style-type: none"> • communication strategies (e.g. plain language) • capacity development approaches (e.g. education, counselling, peer support, referral and home visits) • community development approaches (e.g. engaging with community groups to address needs of participants) • organizational development (e.g. building organizational support for breastfeeding promotion) • policy development (e.g. supporting breastfeeding friendly communities through public policy)

Appendix E continued...

<p>Encountering difficulties as a provider in promoting and supporting breastfeeding within health literacy context</p>	<ul style="list-style-type: none"> • any sources of conflict or tension • lack of acceptance of your advice • access to suitable materials • time
<p>Feeling prepared to promote breastfeeding in a way that considers the notion of health literacy</p>	<ul style="list-style-type: none"> • education/training for practice • in-service education • personal experiences that influences practice • awareness of health literacy and sources of awareness raising • sources of evidence to support practice (e.g. infant feeding recommendations) • suitable resources/ materials on infant feeding <p>Ask for sample print materials.</p>
<p>Identifying key processes in maternal health literacy by looking at practitioners' activities to promote and support breastfeeding</p>	<p><i>Vignettes:</i></p> <p>“ I am now going to give you some short scenarios about mothers involved in making decisions about how to feed their babies. I would like you to tell me what you think about each one.”</p> <p>Read vignette.</p> <p><i>Reflective questions:</i></p> <ol style="list-style-type: none"> 1. What's happening here? 2. Why do you think this was her (mother's) experience? 3. So what do you think this can tell us about maternal health literacy? 4. Are there any implications for health practitioners?

Appendix E continued...

<p>In general, what do you think maternal health literacy means as it relates to the promotion and support of breastfeeding?</p> <p>How useful is it to look at breastfeeding promotion activities through a health literacy lens?</p>	<ul style="list-style-type: none">• key processes/elements of health literacy• viewed from a deficit or capacity perspective (i.e. should health literacy efforts focus on those limited in literacy? include everyone?)• seen as playing mediating role of maternal health literacy between practitioners' interventions and breastfeeding outcomes?
--	---

Remember to get **sample print materials**.

Closure:

Thank you and discuss follow-up:

- request for checking transcript (summary or full text)
- focus group on presentation of findings and participant feedback on implications for practice.

Nov 8, 2005

Appendix F: Vignettes used in personal interview

Colleen's Story

Colleen tried to breastfeed her new baby but found it extremely difficult with no support from the hospital in the first few days. She decided to formula feed her baby. Colleen also works at the local hospital. When asked what support could have helped her she said,

Especially if it's your first child. I know you said you read a lot of things but you can read till you are blue in the face but to actually do. You don't know what your body is going to feel. I mean Anna was really small, she was a very small baby and I was, well I mean I gained a bit of weight. It was very uncomfortable, we had a hard time connecting so I mean these books are based on general overall thing. But I mean you've got to look at the big picture. Women are different sizes, some people can't produce the milk. It's hard to learn.

Jessie's Story

Jessie has two children—a nine-month old daughter and 3 year old son. She breastfed both. In talking about her feeding decision, she said,

From reading literature and going to prenatal classes, I said I would give it a try at the time and everything worked out really well for me and I found the first six weeks the hardest just with no sleep and he was really demanding.

.....I think there's a lot more media coverage now, like more information out there to lead you towards breastfeeding rather than bottle-feeding. Like those ads that you see for formula where it says breastfeeding is still best.

Appendix F continued...

Tina's Story

Tina is a single mother in her early twenties. She breastfed her daughter. When asked how she would support other women in making a decision on how to feed their baby, Tina said,

And don't stress out people that are already worried about things. Motherhood is hard enough so don't make it be this big...

So there is a lot of judgment about every aspect of parenting and it really bothers me because I don't have someone to have the feed back with at night or to talk to. It's pretty much everything you do with a child, the way you feed them or how you dress them, there's always an opinion, and that bothers me.

Patricia's Story

Patricia is a mother of two. Her son is four and her daughter just turned one year. She works part time. She breast fed both and said,

... if you're upset, your milk is not coming in. But you've got two different nurses or three different nurses running around. One is telling you one thing, one telling you something else then the lactation consultant comes in and tells you something different and you are sitting there and thinking oh my god. It just makes it harder on you, especially when it's a newborn and you are trying to be doing the best that you can.

Appendix G: Information letter and consent form for mothers and partners in observation settings

Health Literacy and Infant Feeding Study

Letter of Information

Mothers in Observation Settings

Details of Study

Recently, the Guysborough Antigonish District Health Authority (GASHA) has been focusing on health literacy in order to make sure that their health services meet the literacy needs of all residents. The purpose of this study is to learn more about health literacy by looking at the issue of infant feeding. Between September 2005 and April 2006, I am reviewing printed infant feeding resources throughout the district covered by GASHA. I am also interviewing professional and lay providers working with mothers in hospital and community settings and observing practices in these sites.

As a participant in a program or service in one of these settings, your permission to allow me to observe is requested.

Concerns

You may ask me to leave at any time. All information gathered will be kept confidential and your identity will not be revealed. I will be taking hand-written notes. All records of observation will be stored securely at St Francis Xavier University. At the end of the study when results are reported comments will not refer to individual participants. Your involvement in the study does not affect your legal rights nor any future services, including health care, that you or your baby receive.

Further Information

This study is being conducted by Doris Gillis, Associate Professor, Department of Human Nutrition, St. Francis Xavier University, as part of her doctoral research. For more information about the study, please contact me by telephone at 902 867 5401 or by email at dgillis@stfx.ca.

For questions related to institutional approval of the study, Madonna MacDonald, VP Community Health, GASHA can be reached by telephone at 902 867 4262 or by email at Madonna.Macdonald@gasha.nshealth.ca. If you need to talk to someone else about the researcher or the study, you can contact the Chair of the Human Nutrition Department, Dr. Marian Naczki, at 902 867-2205 or by email at mnaczki@stfx.ca.

Appendix G continued...

CONSENT FORM

MOTHERS IN OBSERVATION SETTINGS

Health Literacy and Infant Feeding Study

Please initial box

1. The study has been fully discussed with me. ☐
2. I have been able to ask questions about the study. ☐
3. I understand that my participation is voluntary and I am free to
withdraw from the study at any time ☐
4. I agree to take part in this study. ☐

Name of Participant (print)

Signature

Date

I _____ have explained this study to the best of my ability, and I believe the participant understands what is involved in participating in the study.

Signature of Researcher (Doris Gillis)

Date

Department of Human Nutrition
St Francis Xavier University
Box 5000, Antigonish, N.S. B2G 2W5
Tel: 902 867 5401

Health Literacy and Infant Feeding Study

Purpose of the study

To learn more about health literacy by looking at the issue of infant feeding.

Why is this study important in this district?

The Guysborough Antigonish District Health Authority (GASHA) has been focusing on health literacy in order to make sure that their health services meet the literacy needs of all residents. Pregnant women and new mothers may use a wide range of infant feeding information and advice as they make decisions about feeding their babies.

How is information being gathered?

- Reviewing print resources on how to feed babies.
- Interviewing professional and lay providers who work with pregnant women and mothers.
- Observing activities in selected sites.
- Holding focus groups to get feedback on findings from providers and mothers.

Who is doing the study?

Doris Gillis, Associate Professor, Department of Human Nutrition, St. Francis Xavier University.

For more information:

Please contact Doris Gillis by telephone at 902 867 5401 or by email at dgillis@stfx.ca.

Appendix I: Interview informants' invitation to focus group interview

Health Literacy and Infant Feeding Study
Invitation to Providers' Focus Group

You are invited to attend a focus group to discuss practice and policy implications based on preliminary findings from the Health Literacy and Infant Feeding Study.

The Guysborough Antigonish District Health Authority (GASHA) has been focusing on health literacy in order to ensure that their health services meet the literacy levels of all residents. Pregnant women and new mothers may use a range of information and advice in deciding how to feed their babies. This study explores the meaning of health literacy by looking at the issue of infant feeding, in particular lay and professional efforts to promote and support breastfeeding. Preliminary findings will be presented from in-depth interviews with 30 professional and lay providers who discussed their practices and perspectives on how women throughout GASHA access, understand and use information in their infant feeding decisions. Your feedback and input on implications of these findings is invited.

Please contact Doris Gillis at dgillis@stfx.ca or 867-5401 to indicate which of the following sessions you wish to attend:

Wednesday, November 15, 3:00 PM - 4:00 PM
Atlantic Superstore Community Room, Pt
Hawkesbury

Friday, November 24, 2:00 PM – 3:00 PM
Level 1 Conference Room, St Martha's Regional
Hospital, Antigonish

**Doris Gillis, Associate Professor, Department of Human Nutrition,
St. Francis Xavier University, Antigonish, Nova Scotia, B2G 2V3**

Appendix J: Information letter and consent form for mothers' focus group interviews

Health Literacy and Infant Feeding Study

Letter of Information - Mothers' Focus Group (Antigonish)

You are invited to attend a focus group to hear and talk about a local study on health literacy and infant feeding. As a first time mother of a young child, your reactions to the findings of this study are very important. The session will last no more than an hour and your participation is strictly voluntary.

Time: Thursday October 26th from 11:30 AM to 12:30 PM

Place: Antigonish Kids First Family Resource Centre

Details of Study

Recently, the Guysborough Antigonish District Health Authority (GASHA) has been focusing on health literacy in order to make sure that their health services meet the literacy needs of all residents. The purpose of this study is to learn more about health literacy by looking at the issue of infant feeding. Between October 2005 and June 2006, I interviewed 30 professional and lay providers working with mothers in hospital and community settings throughout the district covered by GASHA. I also observed practices in these sites and I reviewed printed infant feeding resources. Key findings will be presented and discussed in two focus groups of 6 to 8 mothers participating in Kids First Canada Prenatal Nutrition Programs.

Who May Participate

First-time mothers who have a baby between 6 months and 24 months and who participate in Kids First programs in Antigonish and Guysborough are invited. As a participant, you will not receive any payment. Travel and child care expenses will be provided according to current Kids First guidelines.

Concerns

As a participant, you will not have to respond to any questions you do not wish to answer and you can leave the session at any time. All information gathered will be kept confidential and your identity will not be revealed outside of the session. The discussion will be audio-taped in order not to miss anything that is said. However, if you or any member of the group does not want the discussion to be taped, only hand-written notes will be taken. All tapes and written reports of the group's discussion will be stored securely at St Francis Xavier University. At the end of the study when results are reported, comments will refer only to the group, not to individual participants. Your involvement in the study does not affect your legal rights nor any future services you or your baby receives.

Appendix J continued...

Further Information

This study is being conducted by Doris Gillis, Associate Professor, Department of Human Nutrition, St. Francis Xavier University, as part of her doctoral research.

For more information about the study, please contact me by telephone at 902 867 5401 or by email at dgillis@stfx.ca.

For questions related to institutional approval of the study, Madonna MacDonald, VP Community Health, GASHA can be reached by telephone at 902 867 4262 or by email at Madonna.Macdonald@gasha.nshealth.ca. If you need to talk to someone else about the researcher or the study, you can contact the Chair of the Human Nutrition Department, Dr. Marian Naczki, at 902 867-2205 or by email at mnaczki@stfx.ca.

Appendix J continued...

CONSENT FORM

MOTHERS' FOCUS GROUP

Health Literacy and Infant Feeding Study

Please initial in the box.

- | | | |
|----|--|--------------------------|
| 1. | The study has been fully discussed with me. | <input type="checkbox"/> |
| 2. | I have been able to ask questions about the study. | <input type="checkbox"/> |
| 3. | I understand that my participation is voluntary and I am free
to withdraw from the study at any time. | <input type="checkbox"/> |
| 4. | I give permission for my interview responses to be audio-taped. | <input type="checkbox"/> |
| 5. | I agree to take part in this study. | <input type="checkbox"/> |

Name of Participant (print)

Signature

Date

I _____ have explained this study to the best of my ability, and I believe the participant understands what is involved in participating in the study.

Signature of Researcher (Doris Gillis)

Date

**Department of Human Nutrition
St Francis Xavier University
Box 5000, Antigonish, N.S. B2G 2W5
Tel: 902 867 5401**

Health Literacy and Infant Feeding Study **Mothers Focus Group**

Guysborough Kids First Family Resource Centre
Tuesday October 24th 10:30 AM to 11:30 AM

Purpose of the study

To learn more about health literacy by looking at the issue of infant feeding.

Why is this study important in this district?

The Guysborough Antigonish District Health Authority (GASHA) has been focusing on health literacy in order to make sure that their health services meet the literacy needs of all residents. Pregnant women and new mothers may use a wide range of infant feeding information and advice as they make decisions about feeding their babies.

How is information being gathered?

- Reviewing print resources on how to feed babies.
- Interviewing professional and lay providers who work with pregnant women and mothers.
- Observing activities in selected sites.
- Holding focus groups to get feedback on findings from providers and mothers.

Who is doing the study?

Doris Gillis, Associate Professor,
Department of Human Nutrition, St. Francis Xavier University
Telephone: 867 5401 or email at dgillis@stfx.ca.

Appendix L: Literature search strategy

I engaged with the literature in three stages:

1. Early familiarisation with the literature.

I first became familiar with the body of literature relevant to health literacy in 1999 when I was involved in a study about health literacy in the health district where this case study is set. I became aware of emerging debates in the literature and the call for further exploration of the concept of health literacy within health promotion contexts—an awareness which prompted this doctoral study looking at dimensions of health literacy in the case of breastfeeding promotion practices. Having also been involved in a previous study about breastfeeding, I was familiar with literature pertaining to breastfeeding promotion interventions and factors influencing infant feeding practices. I was not aware, however, of the scope of literature which pointed to controversies about the promotion of breastfeeding, such as from feminist perspectives.

2. More focussed examination of the relevant literatures

As I developed my research plan and examined the relevance of health literacy to breastfeeding, I searched the literature to inform my proposed study. My purpose was to bring my knowledge of the literature to the study in such a way as not to impose it upon the data but rather to remain open to seeing how it could be challenged and contradicted by the data. Using the following key terms, an initial search of the bodies of literature relevant to health literacy was conducted in 2005.

health and literacy

health literacy

functional health literacy

interactive health literacy

critical health literacy

To narrow the search to literature pertinent to the direct focus of my study, I used combinations of key search terms such as:

literacy and breastfeeding

health literacy and breastfeeding

health outcomes and breastfeeding and literacy

I also searched by key authors known to be writing about the emerging concept of health literacy beginning late in the 1990s (e.g. Nutbeam, D. and Kickbusch, I.).

The inter-disciplinary nature of the research required the utilization of databases and information gateways from health related disciplines as well as social sciences and education. The following databases were used:

Health related disciplines: CINAHL, Medline (OVID) 1996-present,
Pubmed

Social sciences: Social Science Information Gateway (SOSIG),
Applied Social Sciences Index and Abstracts
(ASSIA),

Education: ERIC (CSA)

Besides using a number of electronic data bases, I hand searched references, for example by checking references cited in publications including systematic literature reviews.

3. Search of literature relevant to themes emerging from analysis and its incorporation into the thesis.

In the final stage, I incorporated literature into the thesis which was most pertinent to the discussion of findings and their implications. Literature was identified through databases and a combination of hand-searching. During the data analysis

in 2006, I completed searches using the following major search terms and combinations:

- functional health literacy
- functional literacy and health
- interactive health literacy
- critical health literacy
- health literacy Canada
- multiple literacies and health
- literacy and health disparities
- health literacy and breastfeeding
- health outcomes and breastfeeding and literacy
- informed choice and breastfeeding

I also followed up suggestions from colleagues. In addition, I had access to recently published papers as a contributor to a number of reviews and reports on health literacy which appeared in the gray literature in Canada during the time of the study. Examples included those by Hauser and Edwards (2006), Charielli (2006), King (2007), and Quigley, Folinsbee and Kraglund-Gauthier (2006). I found Google ScholarTM useful in accessing other gray literature. I also contacted authors to source copies of publications cited in the literature but not accessible through the University of Nottingham or St Francis Xavier University libraries, for example articles about literacy typology cited by D. Nutbeam.

Resources were rechecked as the thesis was nearing submission to search for recent publications. The citation manager, RefWorks, was used to store, display, and retrieve references.

Appendix M: Examples of research diary entries

Writing in my research journals provided an audit trail of activities related to data collection as well as served as a means of capturing ideas and insights as the analysis progressed.

This example illustrates use of journal writing to articulate emerging themes.

March 8, 2007: Identifying low literacy by providers is problematic. Providers think of literacy in absolute terms—but today very few people can't read at all. Confusion about literacy appears to stand in the way of intervention. I must find more literature re: stigmatization of literacy and avoidance of providers in addressing it.

Other entries related to methodological issues such as this note which summarizes my thoughts about my stance as the researcher entrenched in her data.

March 10, 2007: Don't forget the importance of using yourself, the researcher, as the lens and the filter, for analysing this rich qualitative data.

Some notes were pragmatic reminders related to the collection of data and contextual information such as the following example:

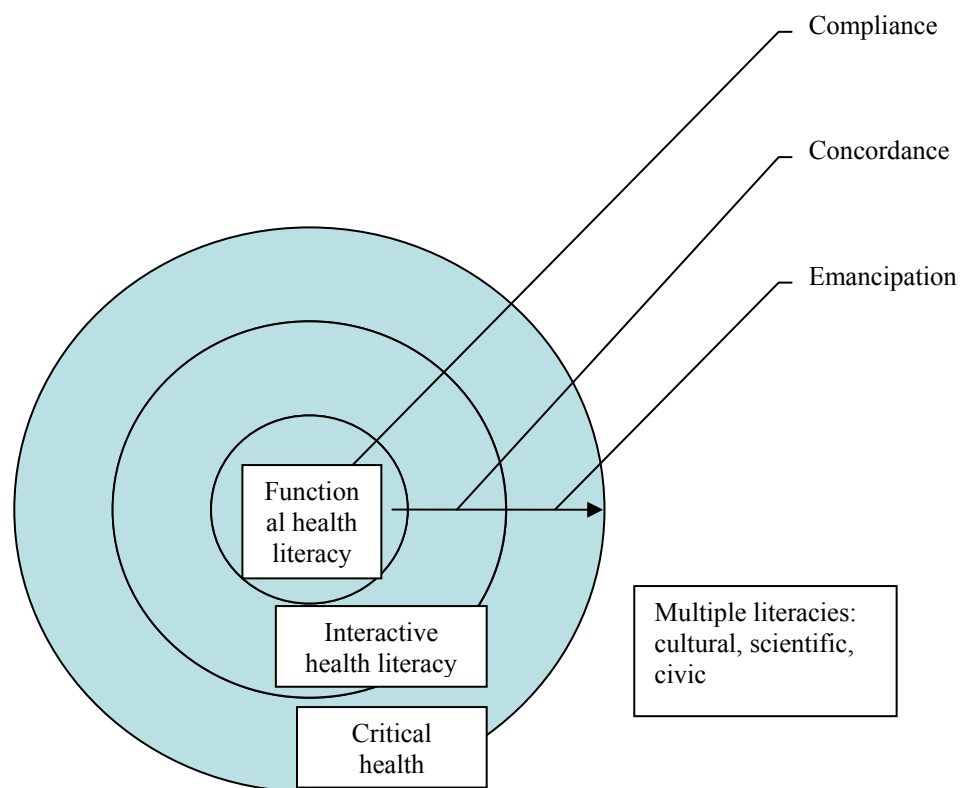
March 29, 2007: Call PHS to ask BM about the preliminary assessment of prenatals prior to class registration. Do they send out assessment forms or ask by telephone?

Entries often represented my struggles to draw connections between emerging themes and efforts to deepen my analysis:

March 27, 2007: Literacy has multiple meanings. Lack of one shared definition requires an ability to engage in critical thinking. Requires one to tolerate ambiguity and perseverance in the face of uncertainty—conditions that many (like me) find unsettling and frequently overwhelming. Need to manage this intellectual uncertainty in order to develop capacity to think critically. Need to have a clear and comprehensive conceptual framework for health literacy—an intellectual roadmap to navigate new terrain....Implications for critical health literacy?

As I wrote about unfolding ideas linking the data with dimensions of health literacy in the current literature, I often included maps of emergent concepts and their relationships.

May 20, 2007: Informed choice implies compliance with information provided encouraging breastfeeding. Even by the promotion of breastfeeding through personal interactions with clients, the expectation is that mothers will breastfeed. Perhaps enabling informed choice is not the best strategy for encouraging breastfeeding. Perhaps need to consider other forms of literacy, e.g. cultural—address tensions between cultural and scientific, and civic in order to change the environment—extension of critical literacy.



Appendix N: An illustration of how themes were verified across the data through the example of ‘informed choice’

Interview Data

‘Informed choice’ was identified as a central concept as practitioners talked about their efforts to promote breastfeeding. In the analysis of transcripts of interview with practitioners using Atlas.ti software, I coded 160 quotations as ‘informed choice’. Two extracts from practitioner interviews follow:

P 3: HLIF P3.rtf - 3:9 [I say, as a professional, I ha..] (87:87) (Super)

Codes: [Informed choice]

No memos

I say, “as a professional, I have to give you the information about breast-feeding. The ultimate decision is yours but as a professional I am expected to give that information about breast-feeding.” And I do give them the handout I have here about breastfeeding and I do go through the demonstration and if they are still adamant they will bottle feed, I say there are 101 reasons just to breastfeed. Would you consider just giving your baby your colostrum? And a lot will.

P 6: HLIF P6.rtf - 6:34 [Health care providers, posters..] (283:283) (Super)

Codes: [Informed choice]

Memos:[ME - 02/14/07 [7]]

Health care providers, posters, all of the prenatal information, if you happen to go for prenatal care, right. It is definitely biased towards breastfeeding, the information you receive. It is not an equal choice people are giving people. We don’t talk about the benefits of formula; we only talk of the benefits of breast milk.

Memos:

MEMO: ME - 02/14/07 [7] (Super, 02/14/07 07:37:13 AM)

Type: Memo

Getting info out there re: breast is best...but most BF because feel they should...not because they have really made an informed decision. An informed decision means informing about breastfeeding benefits.

Observational Data

Observational data reflected the emphasis practitioners placed on providing information about breastfeeding to their clients in order to enable clients to make an informed choice about how to feed their babies.

Perinatal Clinic, Client 1, February 8th, 2006:

Practitioner [P]asks “*how will you feed the baby*”. Mother [M] quickly replies “*bottle feed*” P asks “*would you consider breastfeeding ?*” and she quickly says “*no*”. P asks “*can I ask you*

why?” and M says because “*I am not comfortable with it*”. P says “*breastfeeding is the gold standard.*” M says that “*you can tell how much they are getting with the bottle....know how much they are getting. If breastfeeding, you don’t know how much they are getting*”. P says “*babies talk to us*” and goes on to explain how they are tight fisted when hungry but their arms relax when they are full. She says that the best indicator for the breastfeeding mother is “*what goes in is what comes out*” M says “*yep*”. P says “*do you mind if I give you the speel?*” M says “*it’s not going to work*”. P says “*as a professional I am expected to tell you about breastfeeding but the decision is yours*” P takes the doll and shows her how to position the baby to the breast properly. She then uses the breast prop to demonstrate the latch. P says “*It shouldn’t hurt*”. [Note: is this enabling an informed choice?]

Memos to Supervisors

Based on interview and observational data, the concept of informed choice appeared to be problematic. The implication that an informed choice was a decision to breastfeed reflected tensions related to maternal empowerment.

Memo re: *Ideas on Framing the Analysis* sent to supervisors, September 21, 2006 (p.10-11):

Enabling informed choice

The role of providers in enabling informed choice was addressed by many participants. Many hospital based providers considered that most women had made their decision to breast or bottle feed by the time they saw them in the perinatal clinic or maternity unit. There was a lot of discussion about informed choice and respecting the mother’s decision. Some providers spoke about tensions they experienced in respecting the mother’s choice while still feeling compelled “as a professional” to give them information about the benefits of breastfeeding and how to breastfeed a baby. Many referred to instilling feelings of guilt in mothers (most providers trying to avoid this although a few comments support the benefits of inducing some guilt in women who choose not to breastfeed.) Links between enabling informed choice and the concept of empowerment need to be developed.

NG Track Change Comment: Very interesting – emotion seems very powerful

DG Track Change Response: I was also struck by the notion of emotion as it relates to ‘persuading’ women to make the decision to breastfeed.

Notion of ‘Giving it a try’

Willingness to try breastfeeding is a recurring theme throughout the interviews. Providers (especially public health nurses) give accounts of encouraging pregnant women to “just give it a try”. Reports of ‘trying’ are relayed back from the hospital nurses with

the referral to the public health nurse. Comments link the effort of 'at least trying' to the mother's awareness that she should breastfeed because it is the best way. Some comments draw the association between encouraging the mother to try without making them feel guilty. One provider commented that a women's use of the word 'trying' was a signal that she was not really committed to breastfeeding and unlikely to continue. Several participants pointed to the limitation of just reading information about breastfeeding and to the importance of hands-on and experiential learning related to the experience of breastfeeding. This seems to be consistent with the notion of 'trying'. This theme is important to develop as it is a key concept related to use of information.

Empowerment.

Many of the issues related to use of information are connected to the concept of empowerment. In particular, comments related to feelings of guilt, being judged as a mother and the extent to which providers consider that they are viewed as a source of expert advice by women seeking information about breastfeeding. The issue of **informed choice** is linked to empowerment. This is an important area to explore as it relates to provision of information on breastfeeding in ways that may moralize breastfeeding and motherhood.

Follow-up memo re: *Other Thoughts* from NG, October 5, 2006:

NG: Do providers really want their clients to be critical?

DG: I would say for the most part no. First and foremost, they want clients to follow their advice to breastfeed. Professional providers want to enable mothers to make an 'informed choice', but it may not be a choice based on critical thinking or reflection of their situational context. The whole notion of 'informed' choice to me is rather void of critical thinking. It is a more acceptable way of saying "compliant" and carries the notion that "I did my job by giving them the information." Discussion of situational context may be used to explain why mothers did not follow the advice. An interview with the PHN in the rural fishing community did however clearly demonstrate the role of the provider in enabling critical thinking and spoke to the value of enabling women to "ask the right questions" and to consider the information about breastfeeding within the woman's situational context (going out fishing with her husband and thus having to wean early).

Focus Group Data

During focus group interviews with practitioners, participants talked about tensions they experienced in promoting breastfeeding and the concept of informed choice. They explicitly referred to the assumption among practitioners that enabling an informed choice implied a decision to breastfeed.

Practitioners' Focus Group 2, November 30, 2006. (p.7):

Practitioner: So if we are doing all of those things to perfection and our breastfeeding rate is 50%, are we going to say that we are a failure at what we have done? If we are only looking at the breastfeeding initiation and duration rates then the potential is there that we may always rate ourselves a failure. We are just assuming if we do all of those things we are going to get those rates up and they are going to make their **informed choice** the way that we perceive that they should.

DG: But maybe there is something about the context of the situation here in our part of Canada that makes breastfeeding a little tougher?

Practitioner: There is something about promoting breastfeeding. We are dealing with social supports; there are a lot of people, the family makes the decision, the father of the baby is involved but ultimately it is the women's decision so we are looking at about half the population that is actually making the decision if we let everything else go. But why is breastfeeding, from other issues, even looking at the relationship with the doctor, the nurse, the nutritionist, the family, why is breastfeeding so different from eating well or stopping smoking or reducing alcohol during pregnancy? We don't want to offend people, we want to make sure that people make their own decisions but at the same time when you talk about personal experience that comes through in that relationship, I sometimes think that it can be more of a barrier than some of the other issues because we cannot negate how we were fed ourselves by our own mothers. There is so much emotion attached to breastfeeding as opposed to some of the other health issues that are fairly black and white.

Diary Extracts

The following excerpts from my journal illustrate reflections on situating informed choice within the context of health literacy and the emerging themes of normalization and moralization of breastfeeding.

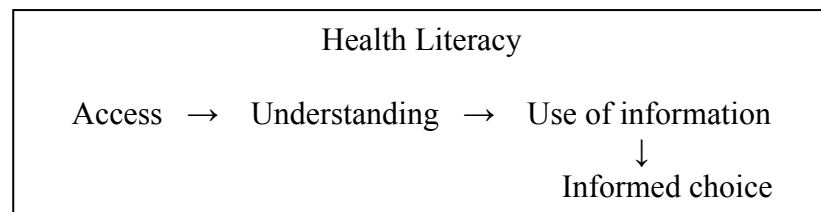
Identifying tensions in practitioners' talk regarding the concept of informed choice and promotion of breastfeeding.

November 30, 2006 entry:

[Initials of practitioner] stressed intended outcome of informed choice is breastfeeding but questioned whether this was the case in practice. [Initials of another practitioner] says goal is really not about informed choice as informed choice may not lead to breastfeeding—one may be informed and decide not to breastfeed. Concept of informed choice is problematic for those promoting breastfeeding.

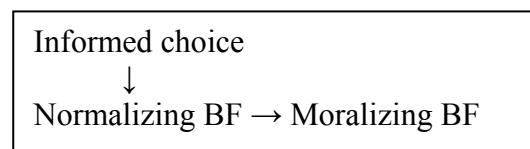
Locating informed choice with respect to core components of health literacy.

January 17, 2007 entry:



Locating informed choice with respect to normalization of breastfeeding and moralization of breastfeeding, i.e. making the 'right' choice.

February 15, 2007 entry:



Linking informed choice to moralization of breastfeeding and use of the phrase, 'give it a try'.

May 16, 2007 entry:

Informed choice is the hallmark in breastfeeding promotion and is consistent with Nutbeam's health promotion view of health literacy. During supervision with EM, she referred to the delegitimizing of 'choice'. Informed choice implies empowerment of mothers to make final choice/decision about how to feed their babies...'Give it a try' reflects interactional play between professional and mother. It is hard for mothers to refuse to 'give it a try' in light of scientific advice (see Apple's scientific motherhood) and in advance of the experience of BF. Hard not to BF—no defence. Only postnatally is there more scope for the mother to not BF due to reasons/excuses e.g. bleeding nipples (anticipatory accounts). 'Give it a try' is an interactional strategy (see EM 1999, p. 204). Informed choice and 'give it a try' let providers off the hook too. They say 1) mothers lack commitment—never intended to BF, and 2) the professional informed mothers and they tried and didn't succeed—professionals did their job, i.e. they 'informed' mothers. Mother's choice to breastfeed is reflected in increased initiation rates, but duration rates are not up. Other factors/conditions required to support duration are not considered. According to EM, wouldn't it be better to focus on maternal empowerment—of all mothers. Current approach is corrosive to self-esteem of mothers, and therefore, is likely worse for the baby. I think that the 'normalization' discourse makes bottle feeders feel 'not normal' and guilty.

Appendix O: Readability assessment of key infant feeding resources published by Public Health Services, Nova Scotia Department of Health.

Name of Resource	Year published	Total No. of pages	Breastfeeding Content: No. of pages	Readability SMOG: Average Grade Level	Readability Fry Formula: Average Grade Level
Healthy Pregnancy Healthy Baby: A New Life	2004	240	47-66	9	6.3
Breastfeeding Basics	2005	102	102	9	7
Year One: Food for Baby	2005	63	15-28	11	7.6